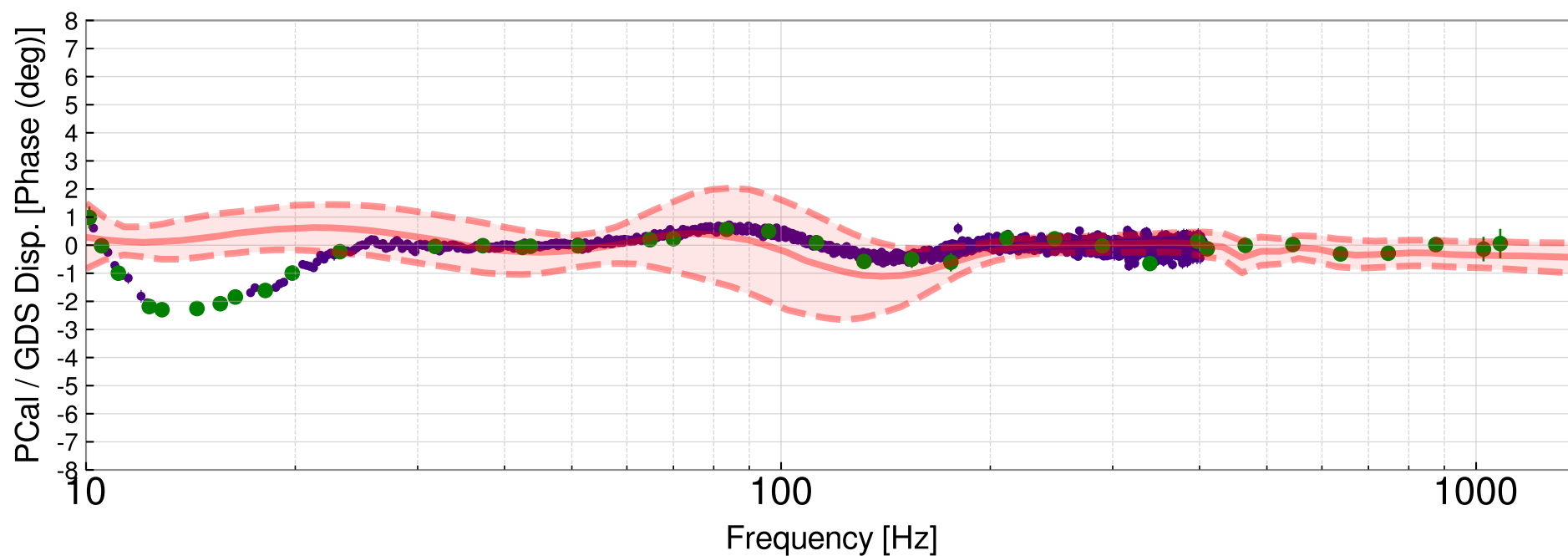
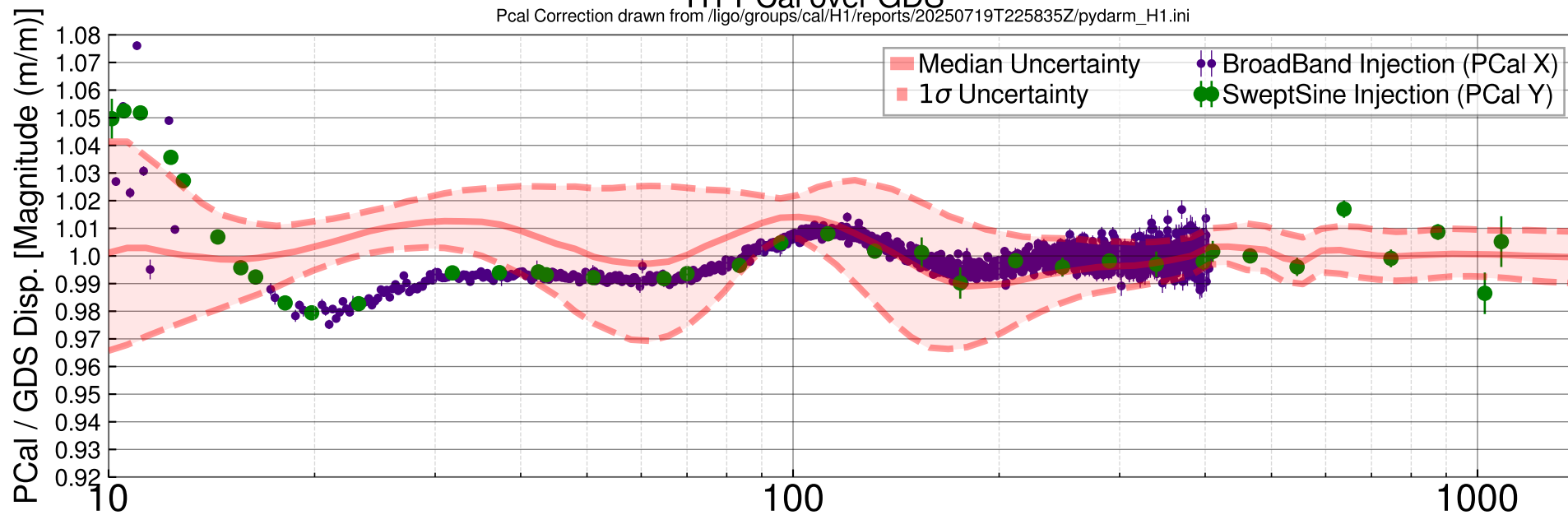


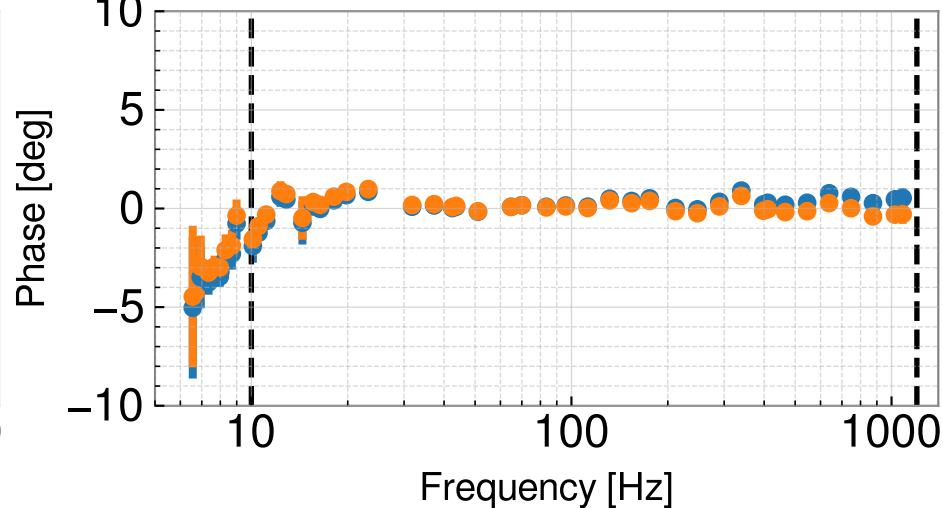
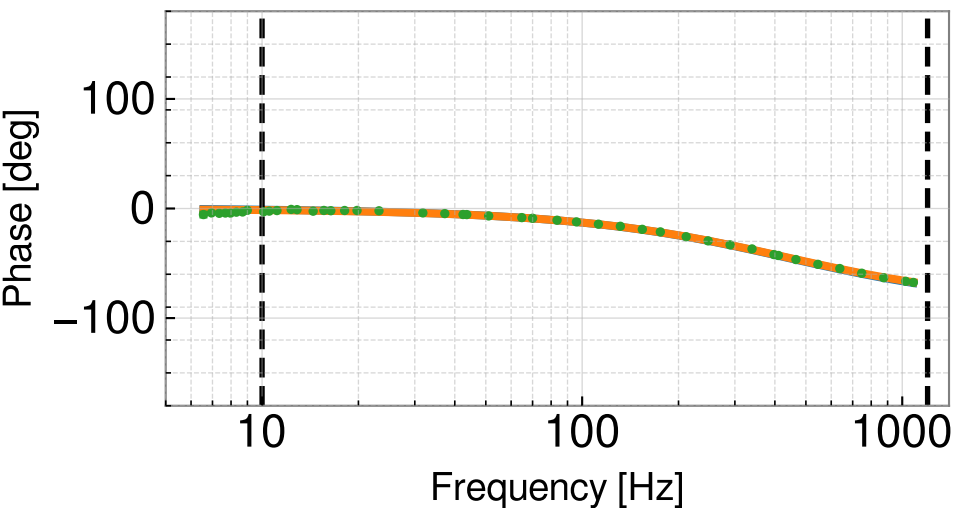
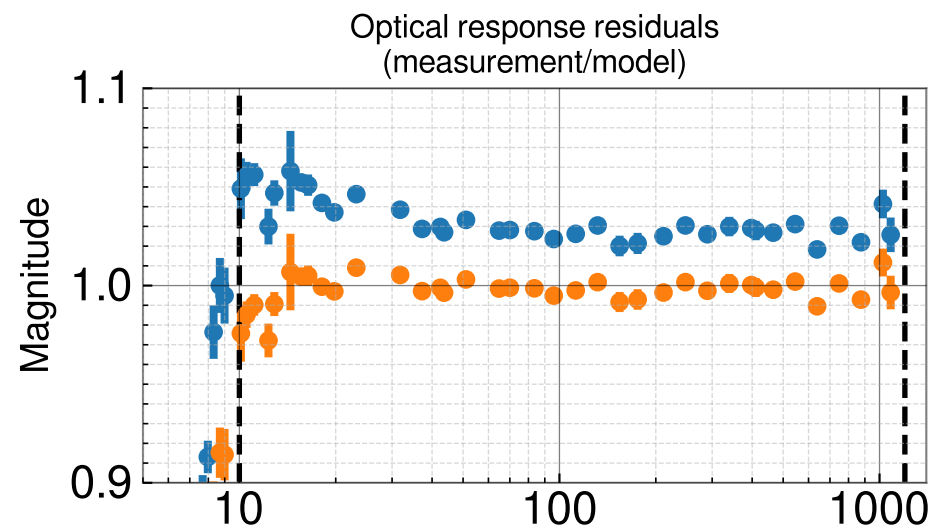
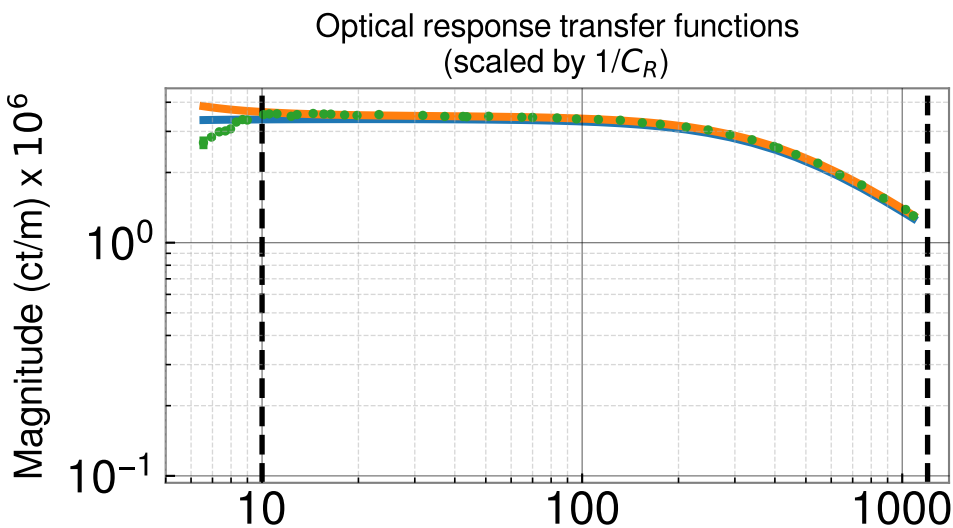
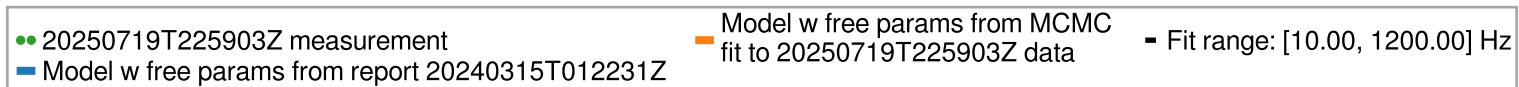
H1 PCal over GDS

Pcal Correction drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



H1 sensing model MCMC summary

All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini`

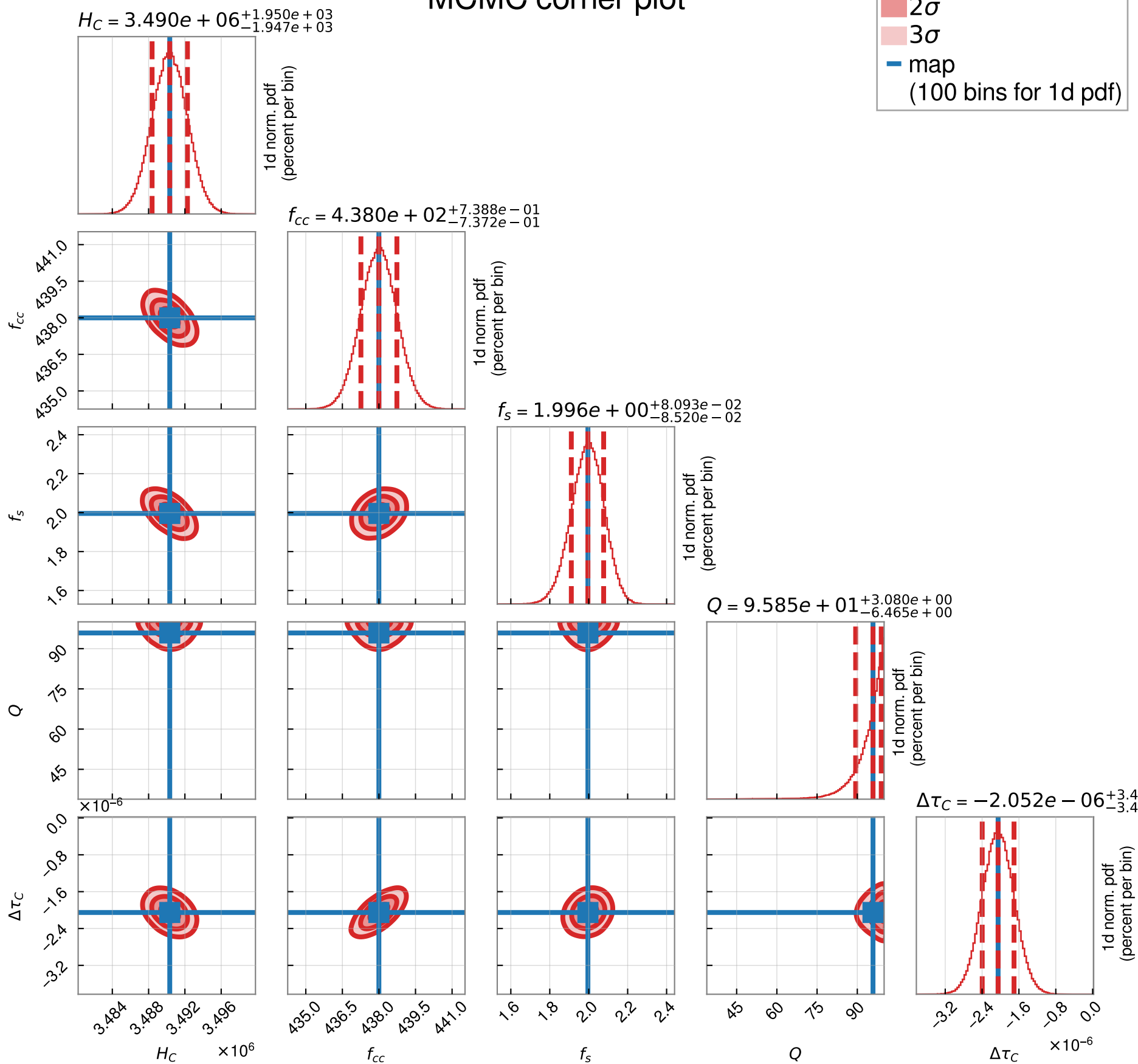


Parameter	(value +/-) value	+	-
Optical gain, H_c (ct/m)	3.49e+06	1950 (0.06%)	1947 (0.06%)
Cavity_pole, f_{cc} (Hz)	438	0.7388 (0.17%)	0.7372 (0.17%)
Detuned SRC spring frequency, f_s (Hz)	1.996	0.08093 (4.06%)	0.0852 (4.27%)
Detuned SRC spring quality factor, Q_s	95.85	3.08 (3.21%)	6.465 (6.74%)
Residual time delay, τ_c (s)	-2.052e-06	3.455e-07 (-16.84%)	3.45e-07 (-16.81%)

2d pdf contours

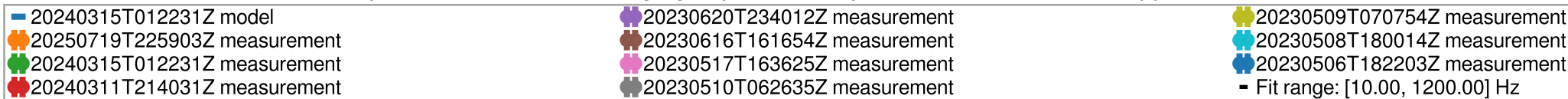
- 1σ
- 2σ
- 3σ
- map

(100 bins for 1d pdf)

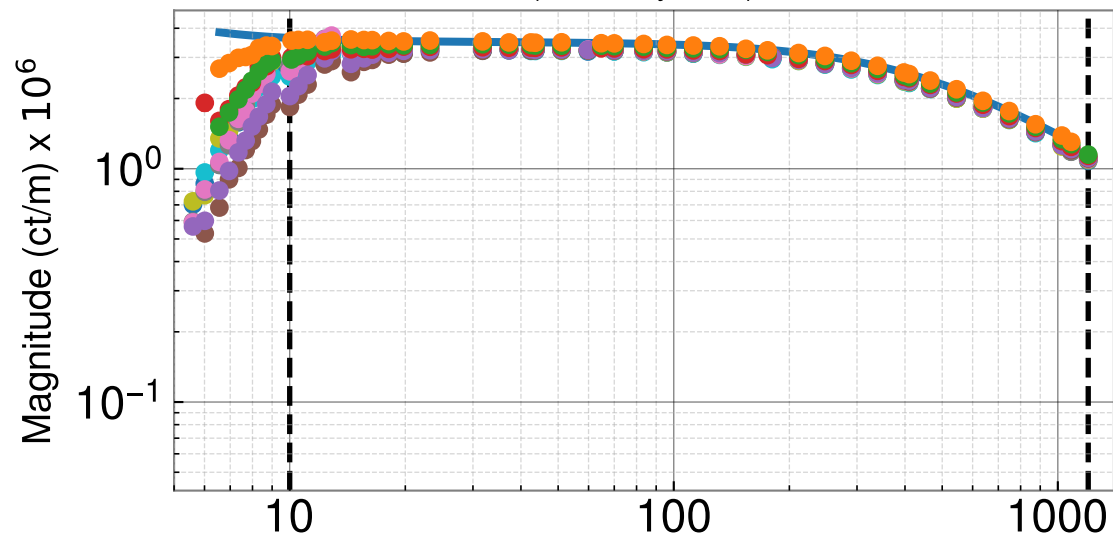


H1 sensing model history (last 9 measurements)

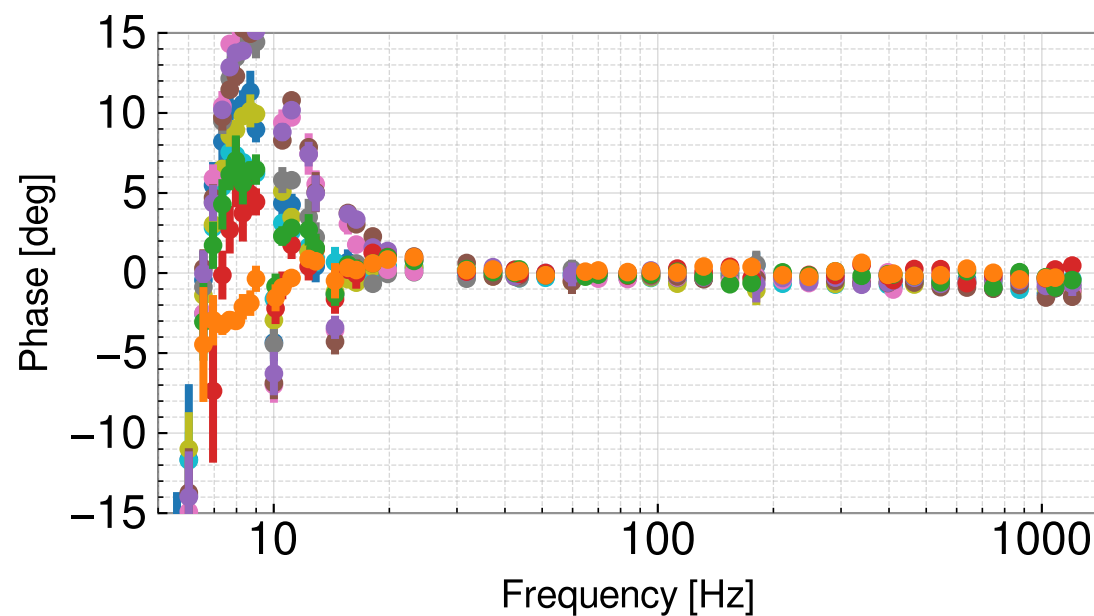
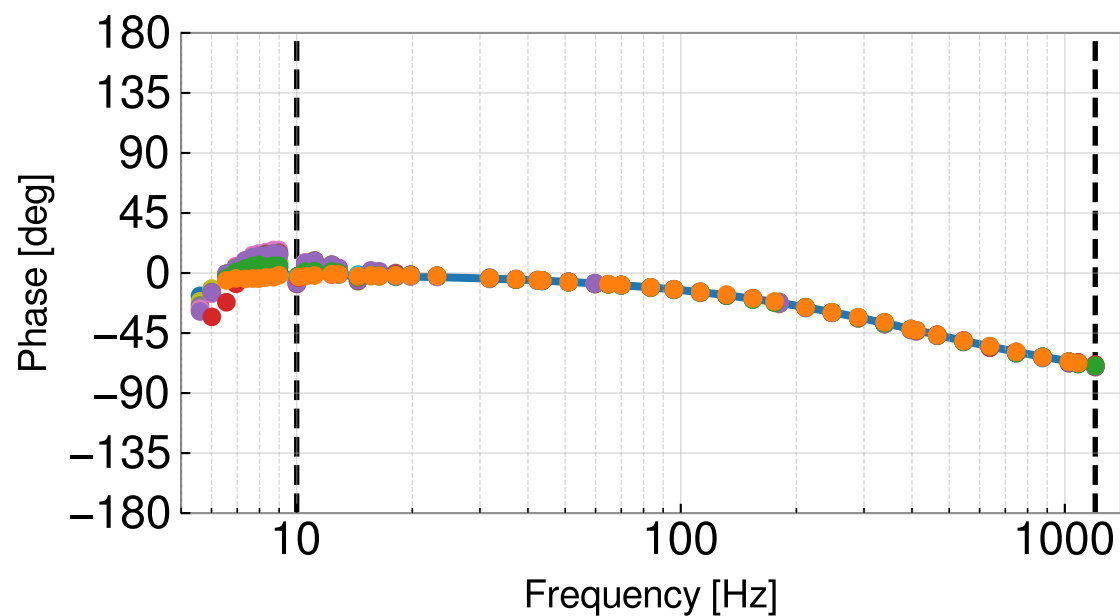
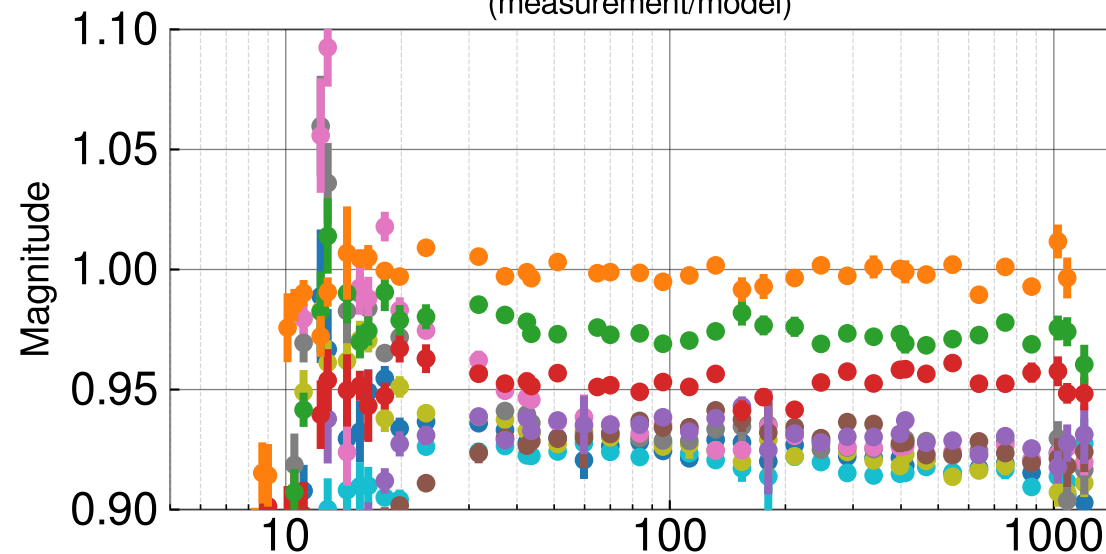
All fixed parameters drawn from `/ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini`



Optical response transfer functions
(scaled by $1/C_R$)

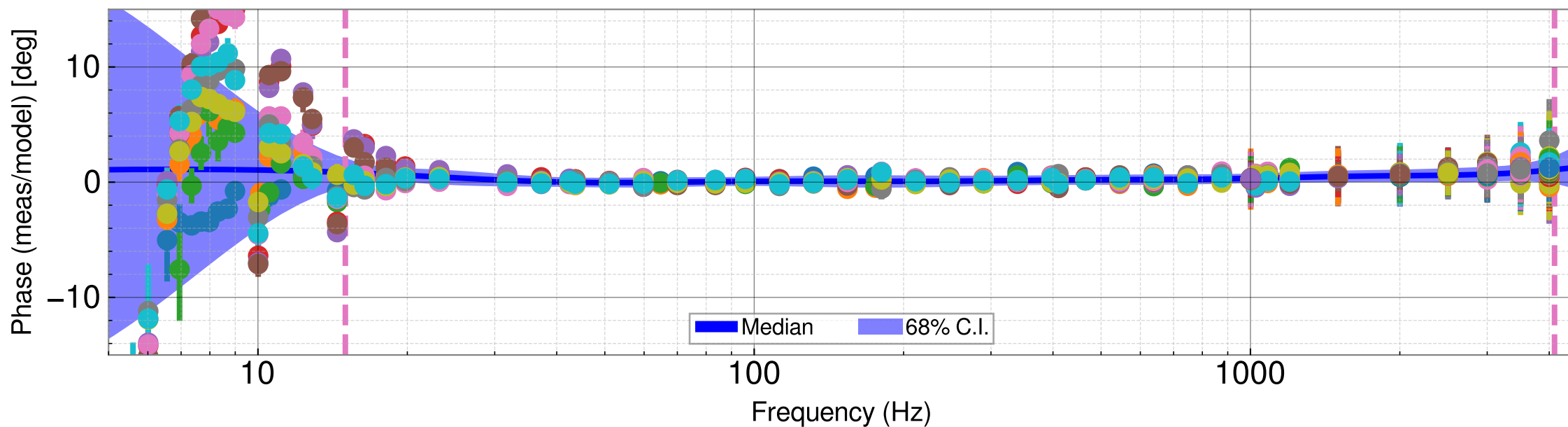
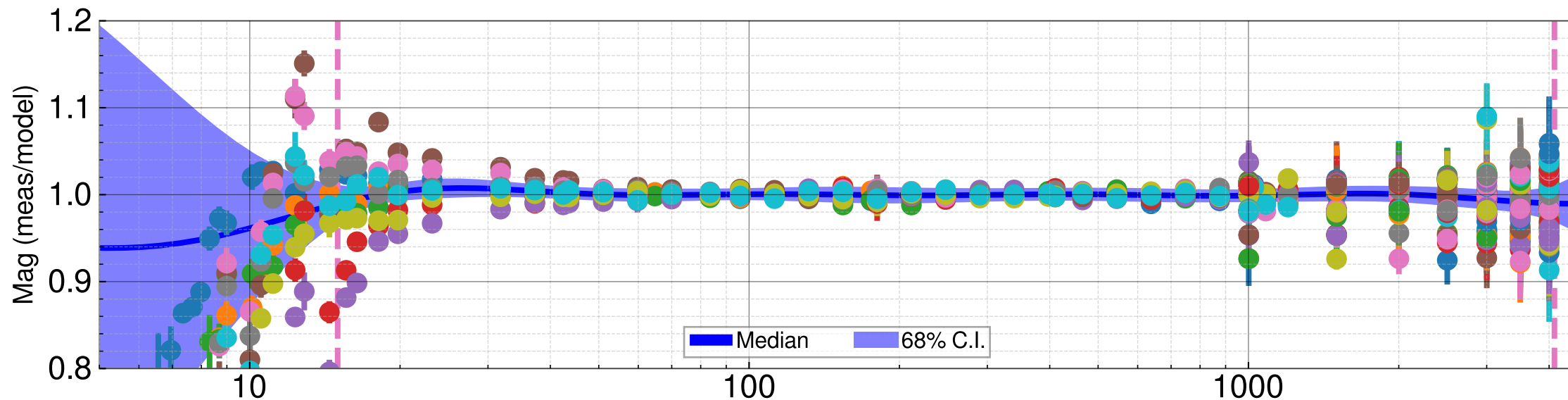


Optical response residuals
(measurement/model)



Sensing GPR

meas. 20250719T225903Z of report 20250719T225835Z
meas. 20240315T012251Z of report 20240315T012231Z
meas. 20240311T214051Z of report 20240311T214031Z
meas. 20230620T235739Z of report 20230620T234012Z
meas. 20230616T163421Z of report 20230616T161654Z
meas. 20230517T154006Z of report 20230517T163625Z
meas. 20230508T170355Z of report 20230508T180014Z
meas. 20230510T064402Z of report 20230510T062635Z
meas. 20230506T172544Z of report 20230506T182203Z
meas. 20230509T061135Z of report 20230509T070754Z

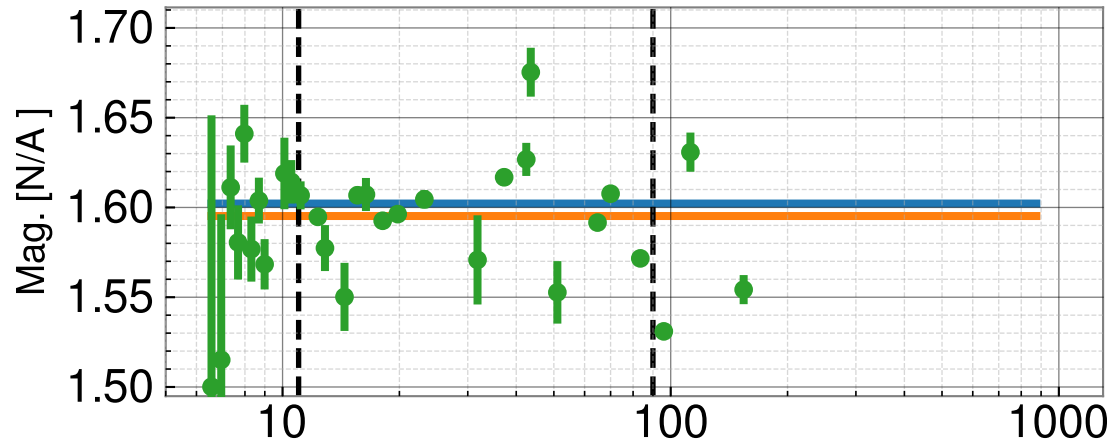


H1SUSEX L1 actuation model MCMC summary

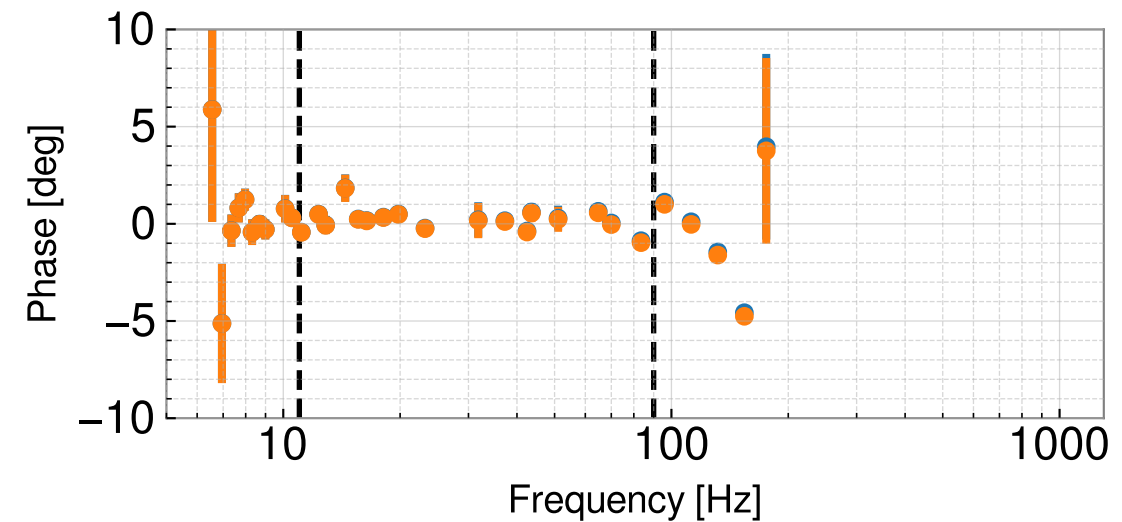
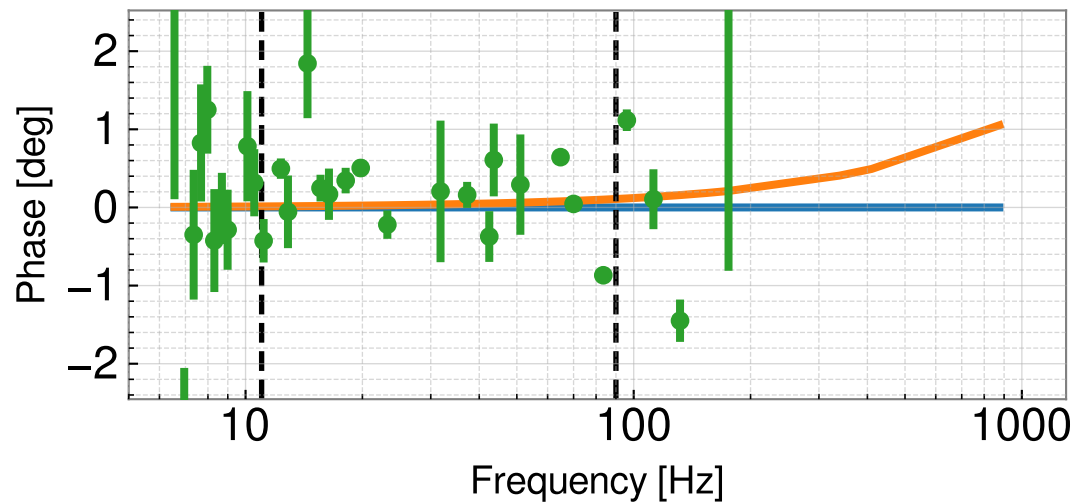
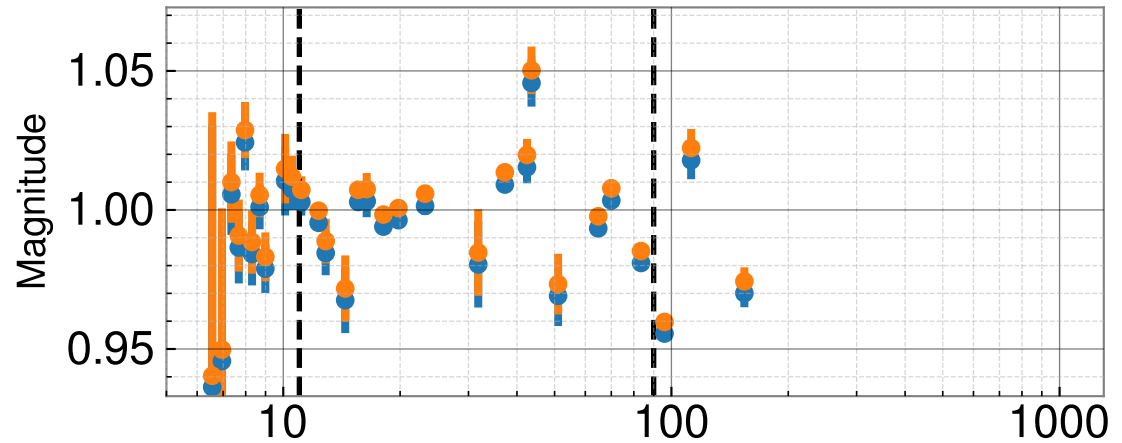
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



Actuation strength transfer functions
(scaled by H_{ref})

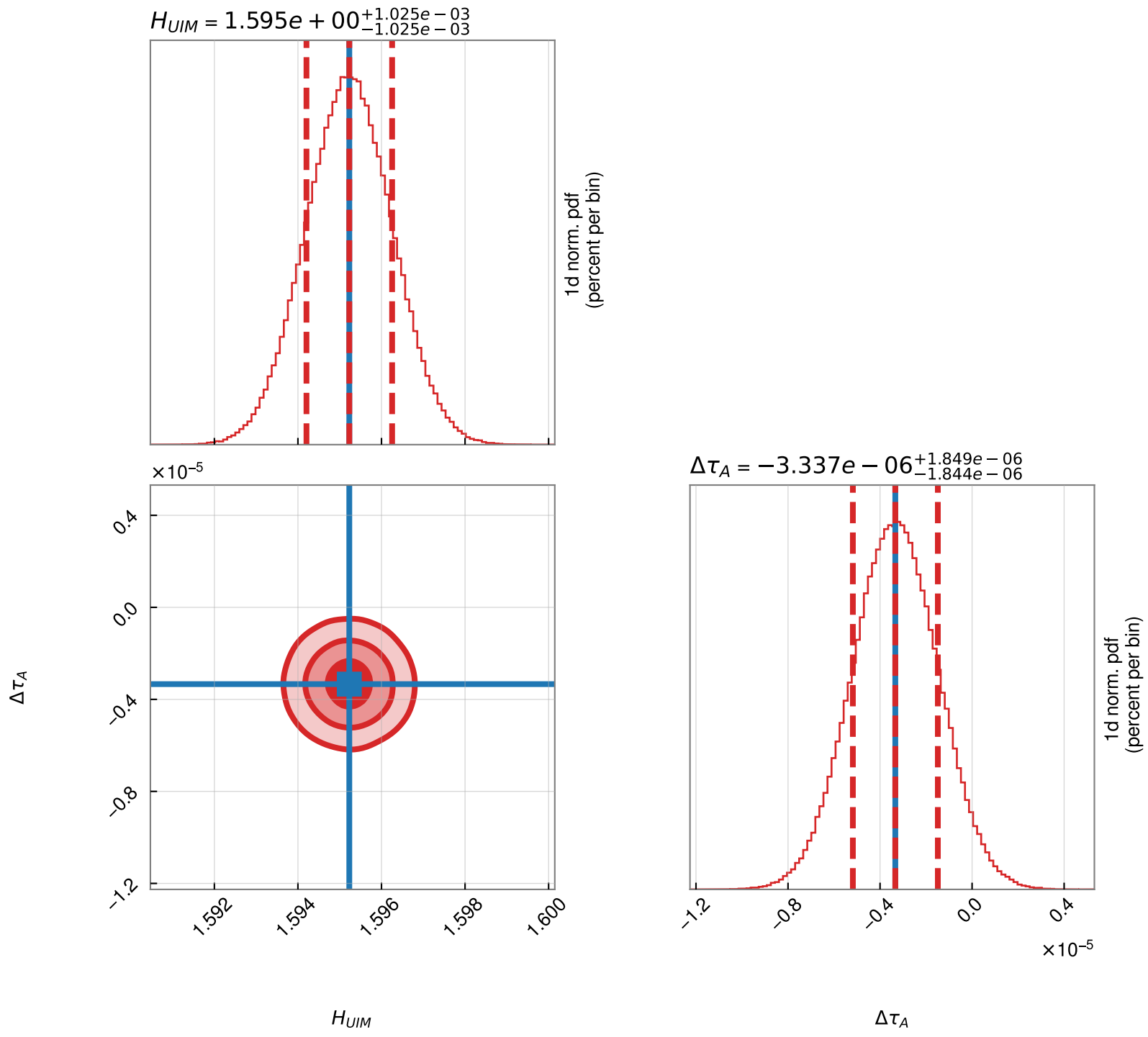
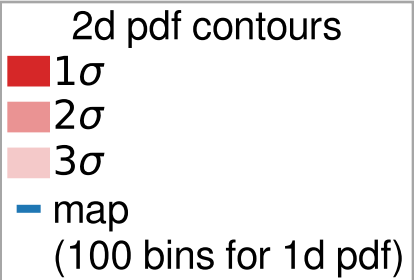


Actuation strength residuals
(meas./model w. free params)



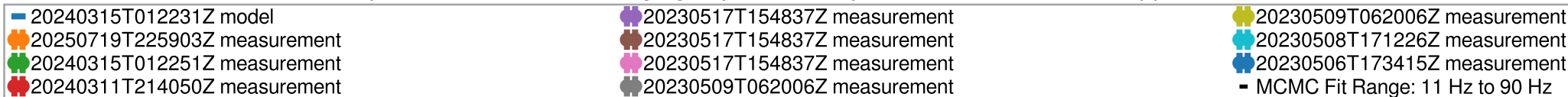
Parameter	(value +/-) value	+	-
Actuation Gain, Hau (N/A)	1.595	0.001025 (0.06%)	0.001025 (0.06%)
Residual time delay, tau_A (s)	-3.337e-06	1.849e-06 (-55.40%)	1.844e-06 (-55.26%)

20250719T225903Z EX L1 actuation
MCMC corner plot

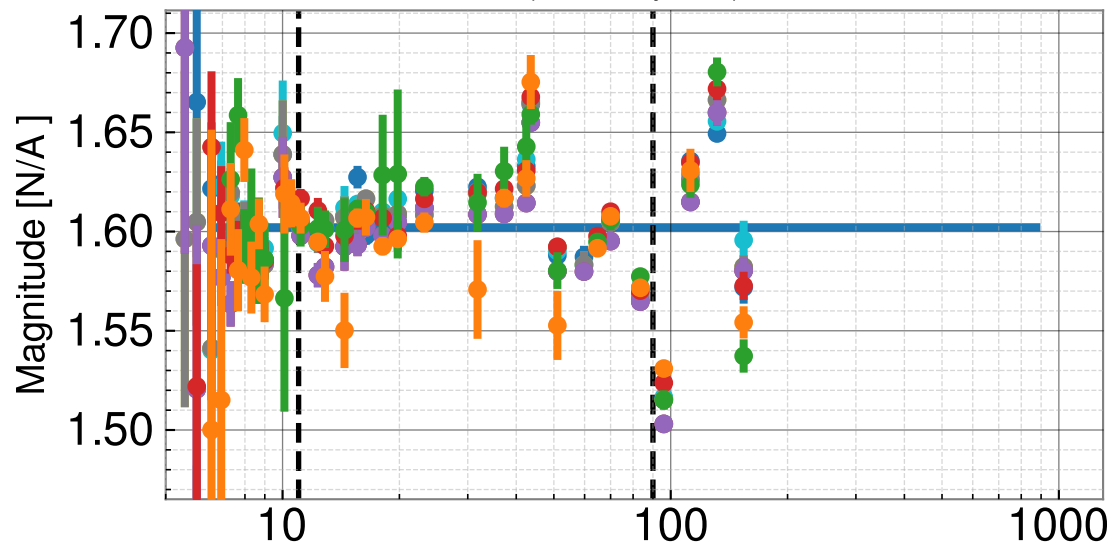


H1SUSEX L1 actuation model history (last 9 measurements)

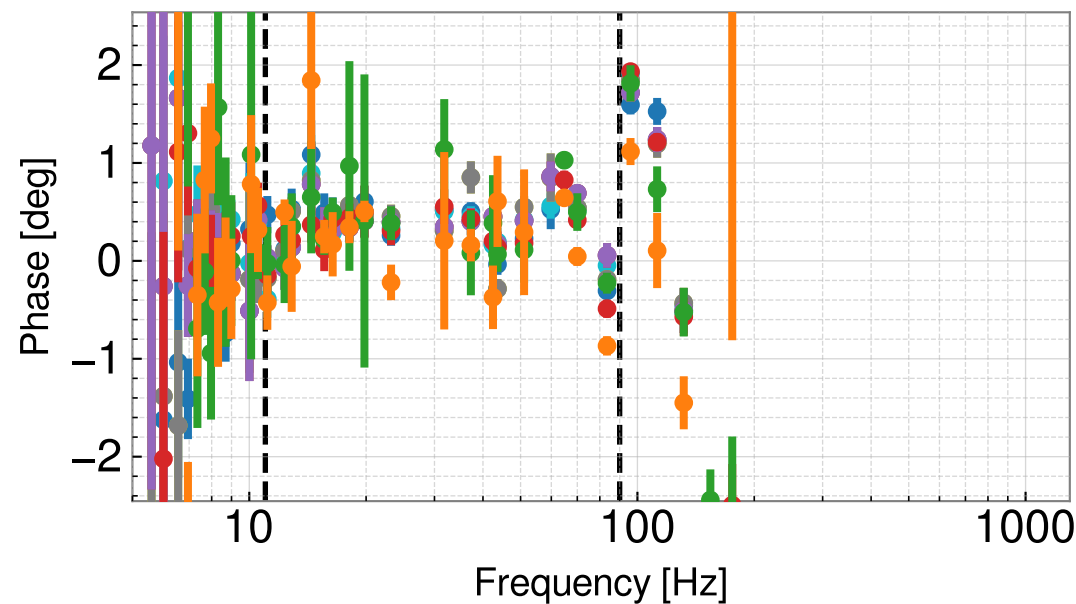
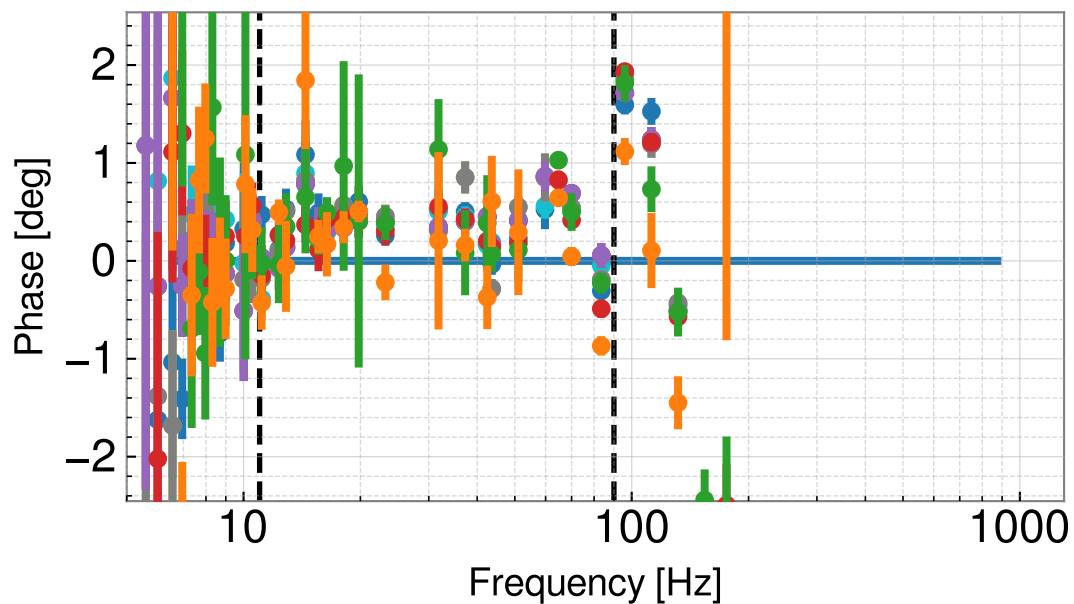
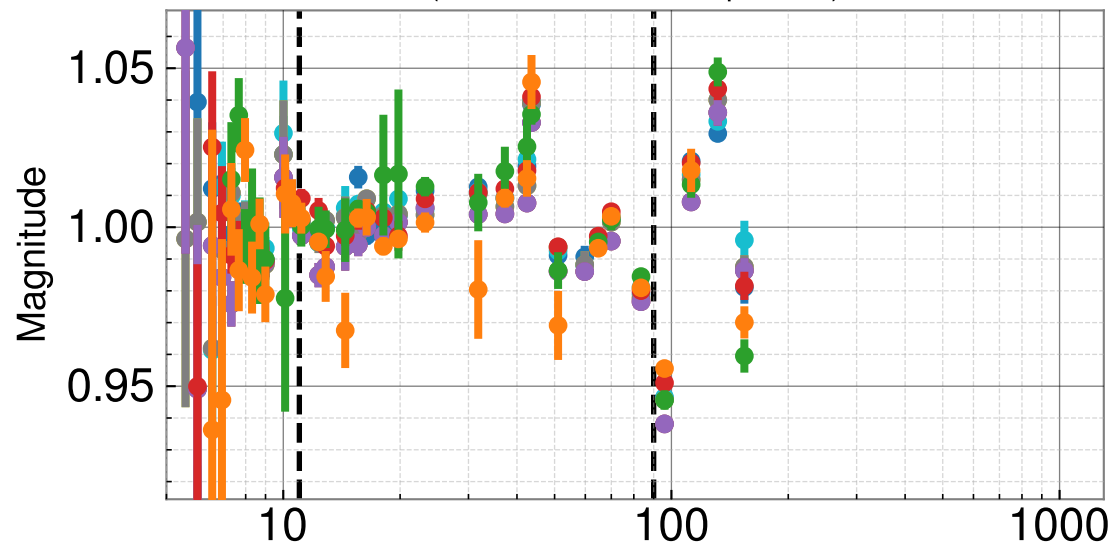
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



Actuation strength transfer functions
(scaled by H_{ref})

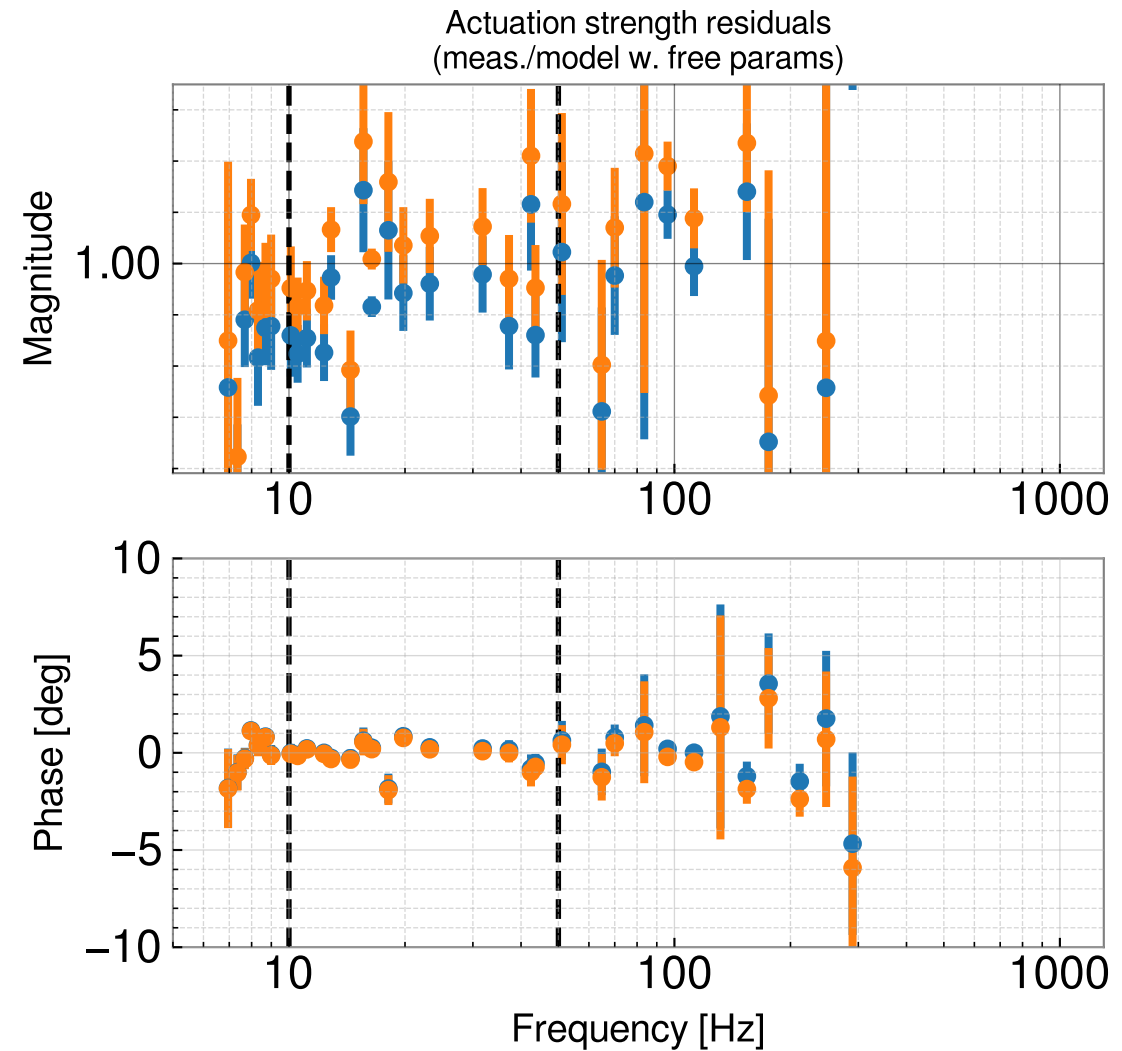
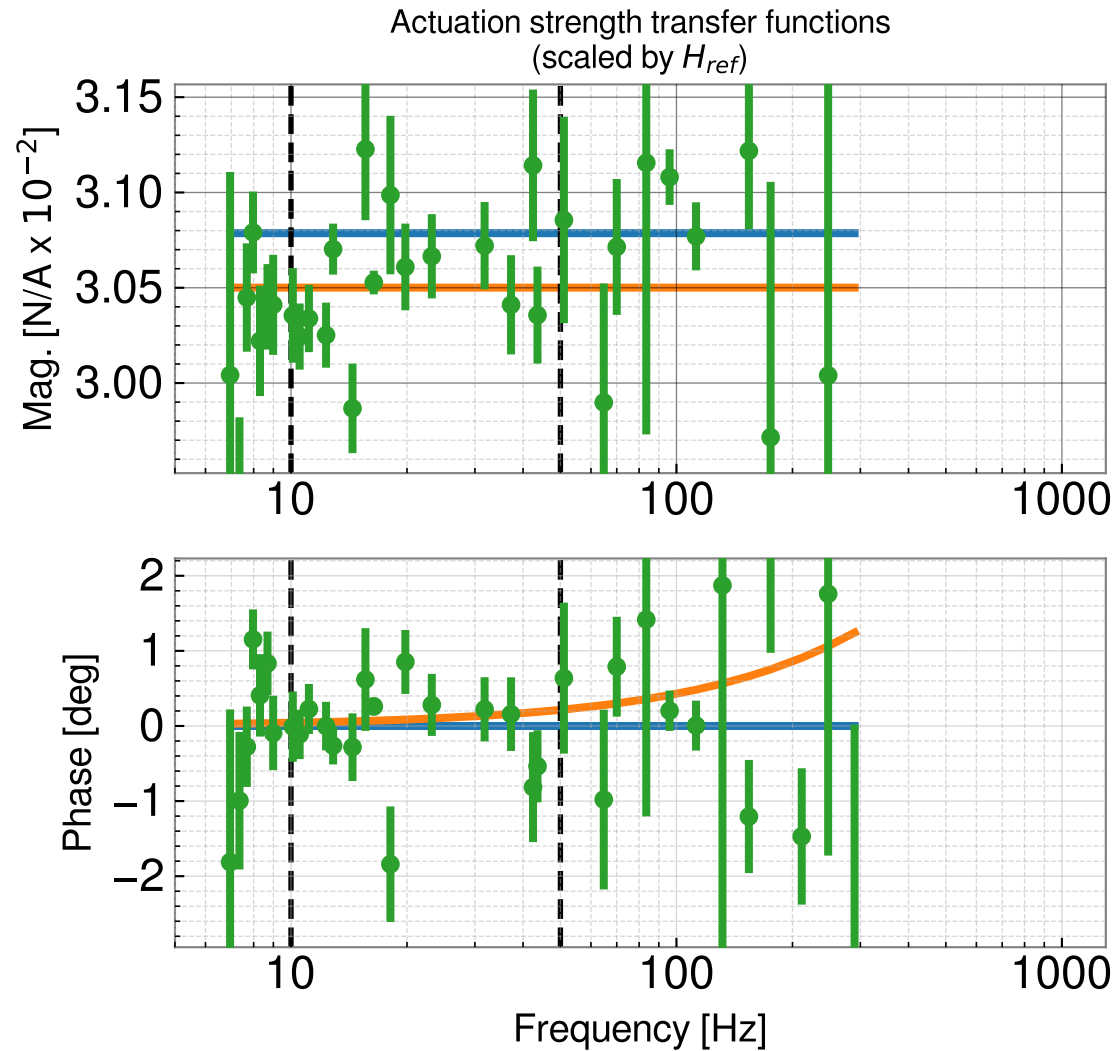


Actuation strength residuals
(meas./model w. free params)



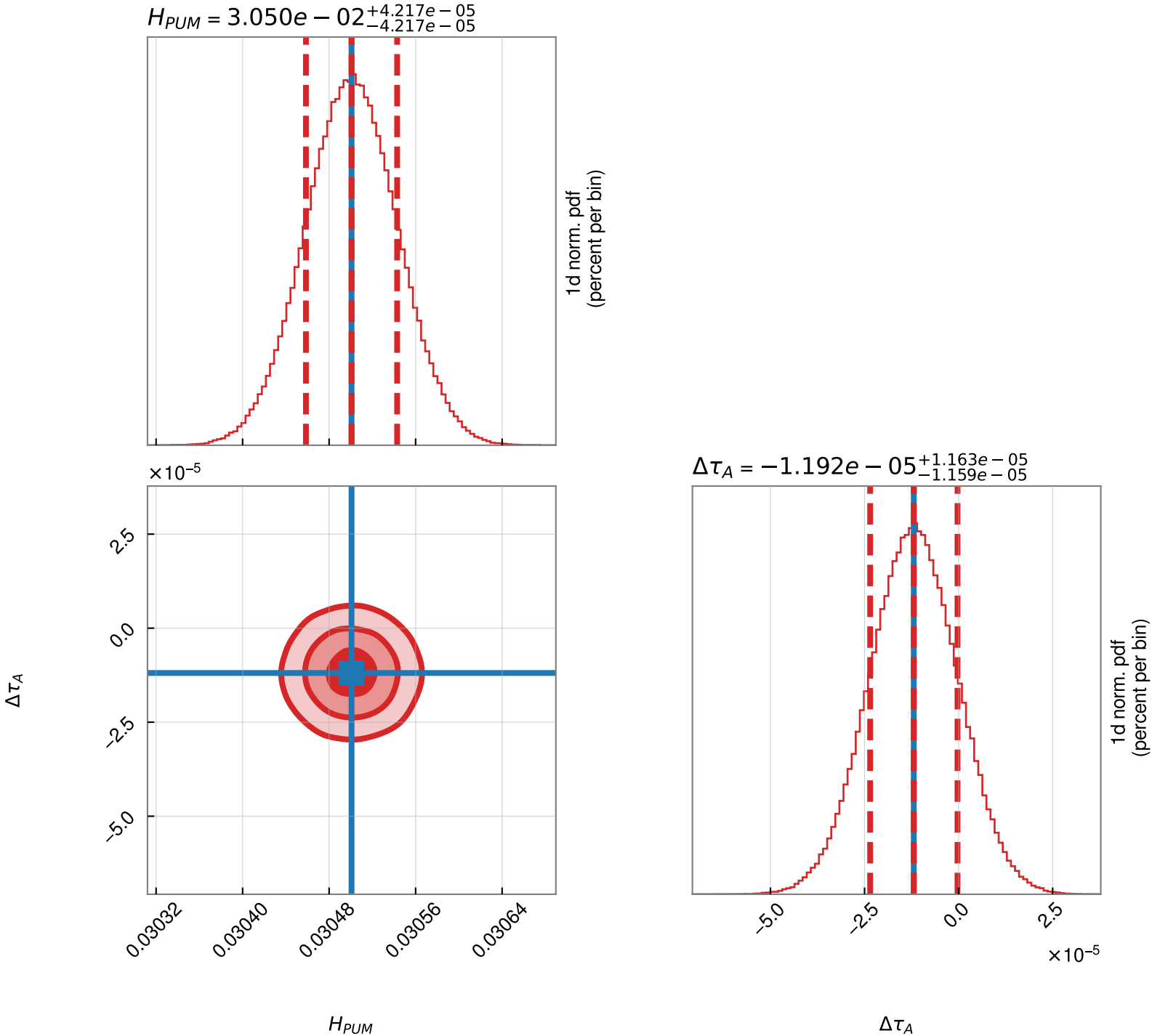
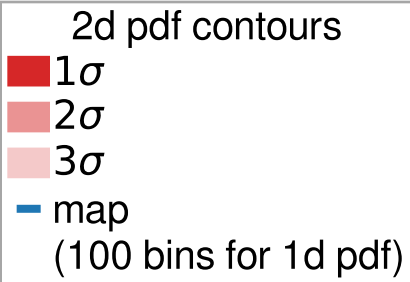
H1SUSEX L2 actuation model MCMC summary

All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



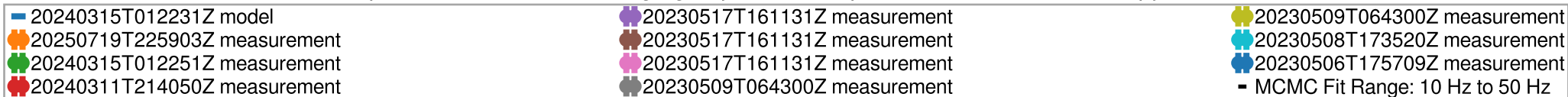
Parameter	(value +/-) value	+	-
Actuation Gain, Hap (N/A)	0.0305	4.217e-05 (0.14%)	4.217e-05 (0.14%)
Residual time delay, tau_A (s)	-1.192e-05	1.163e-05 (-97.56%)	1.159e-05 (-97.27%)

20250719T225903Z EX L2 actuation
MCMC corner plot

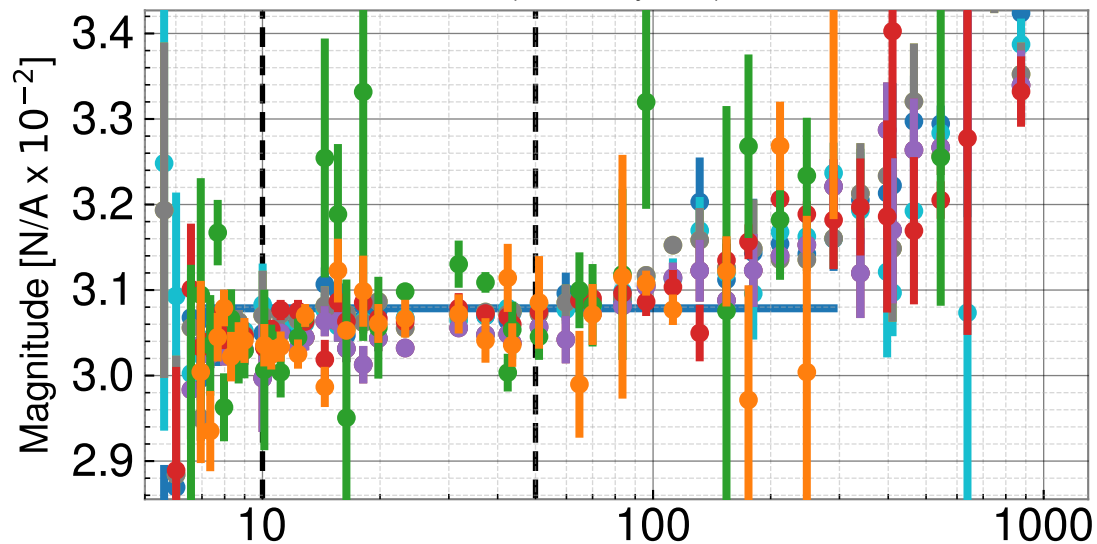


H1SUSEX L2 actuation model history (last 9 measurements)

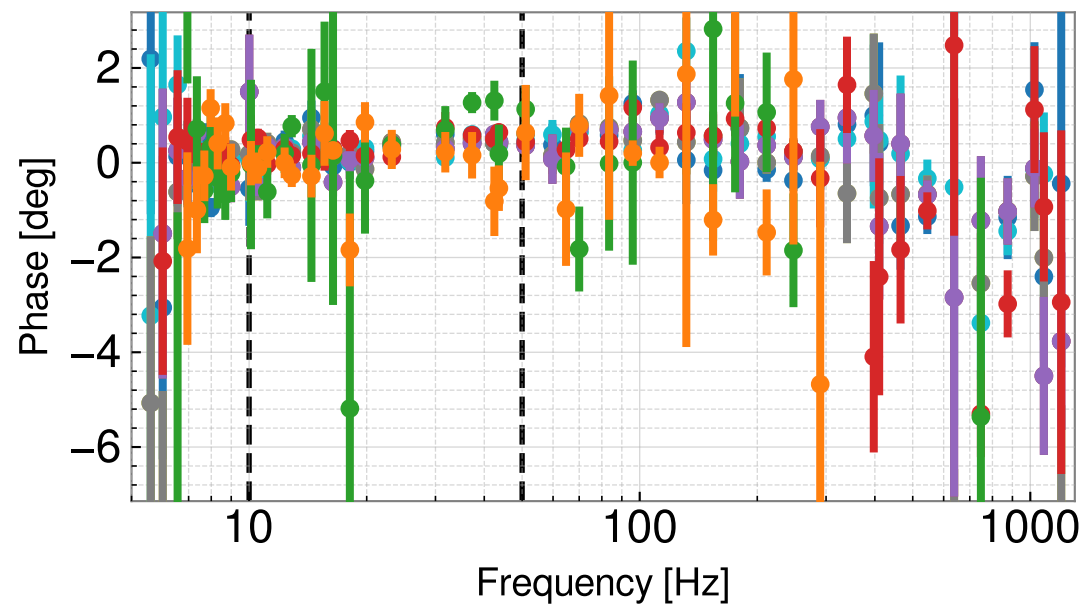
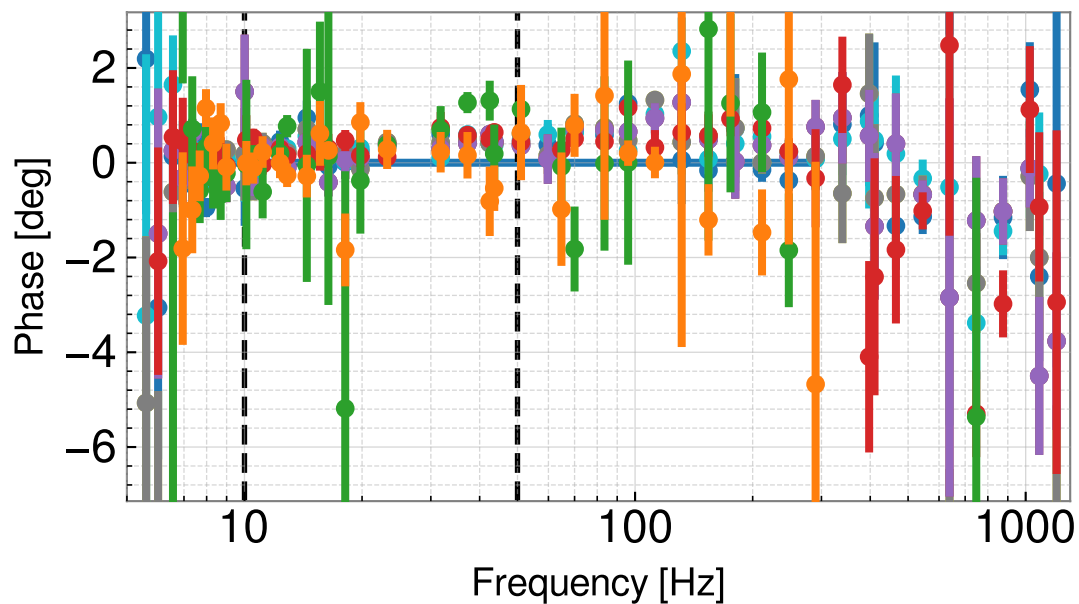
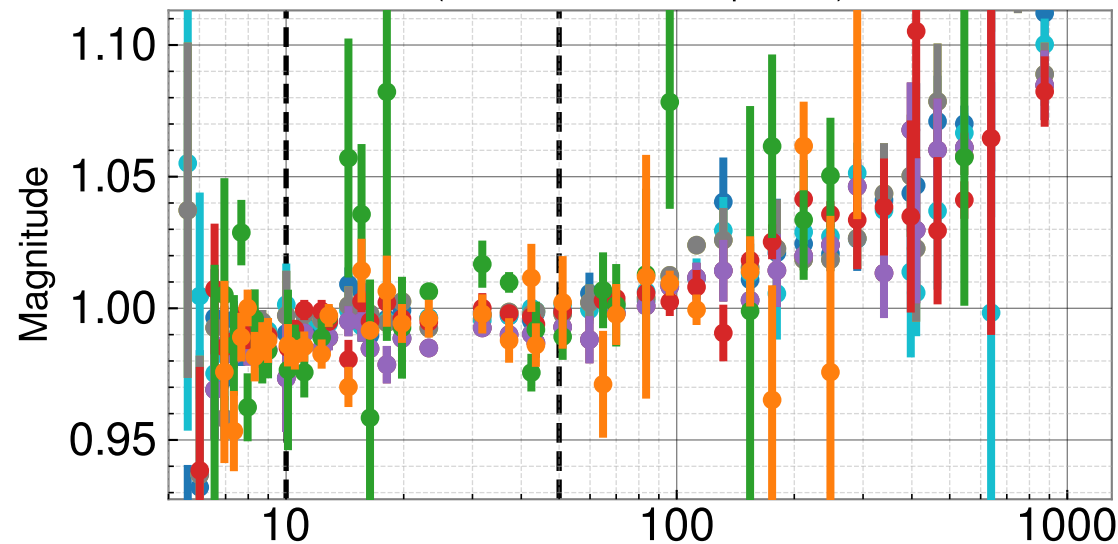
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



Actuation strength transfer functions
(scaled by H_{ref})

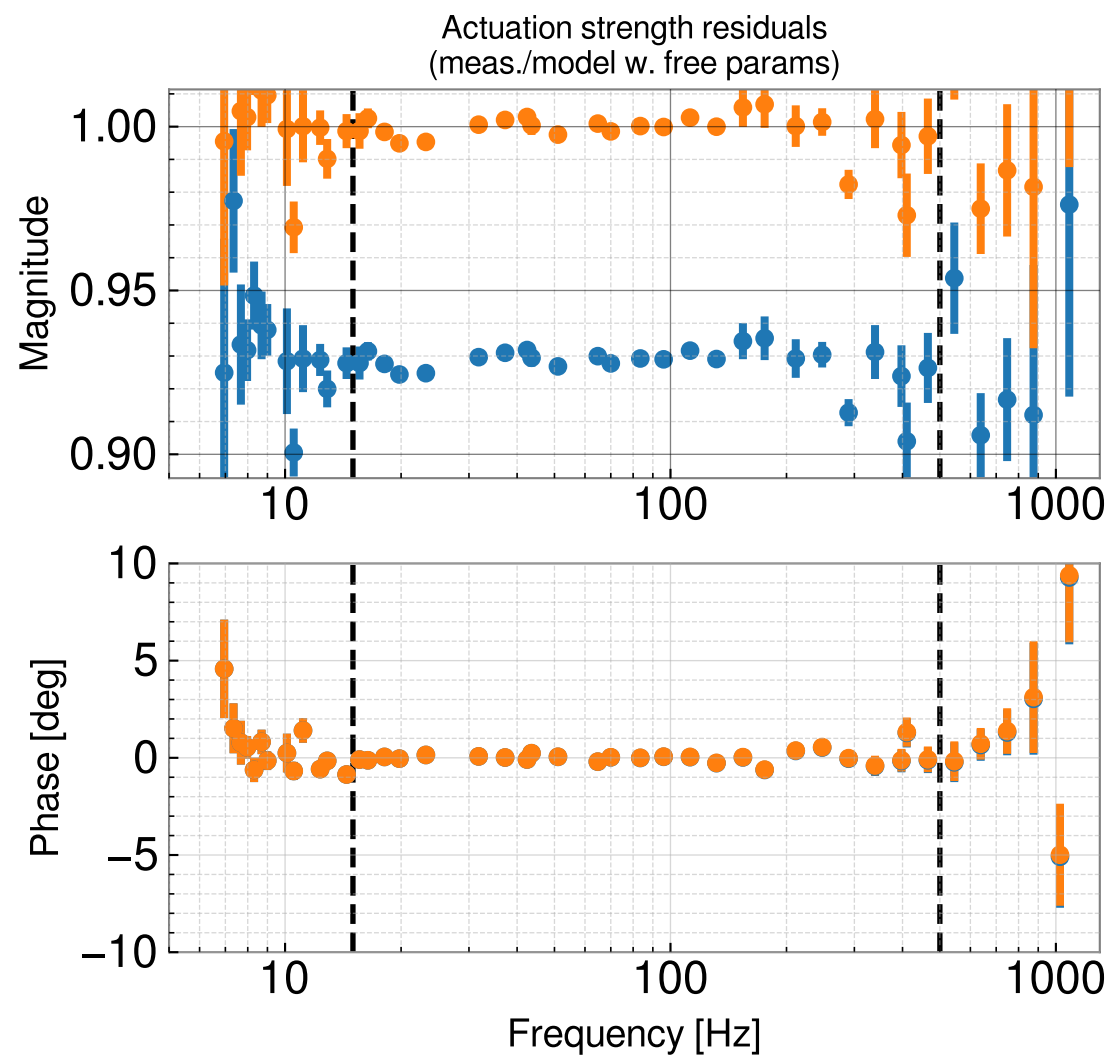
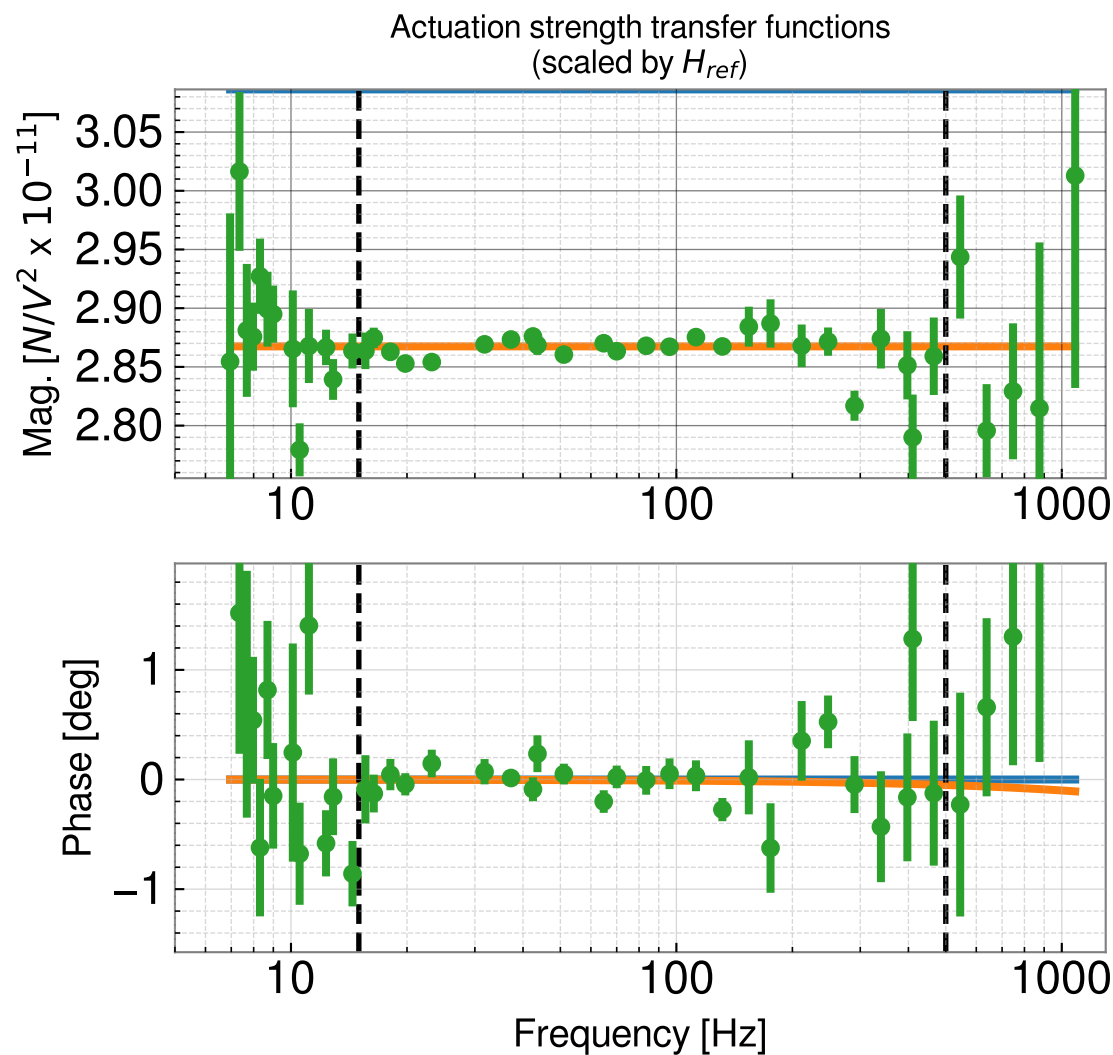


Actuation strength residuals
(meas./model w. free params)



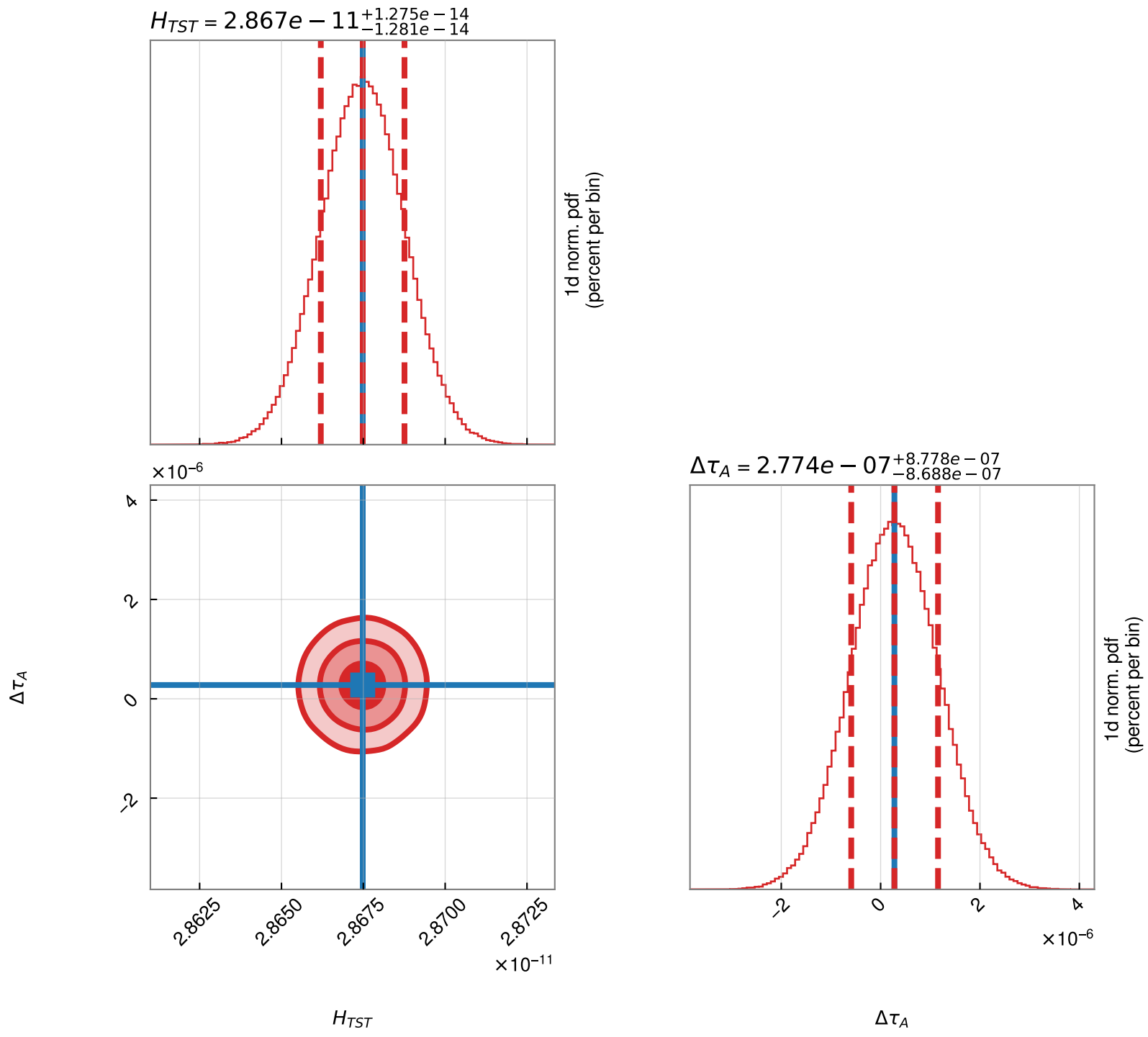
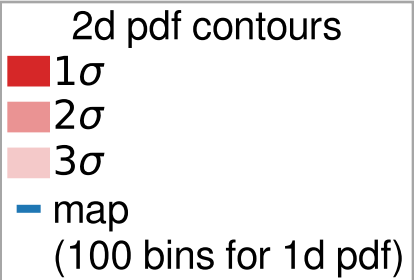
H1SUSEX L3 actuation model MCMC summary

All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



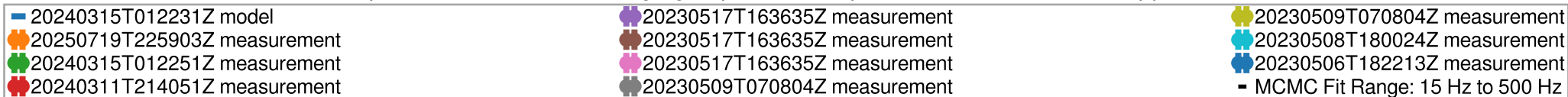
Parameter	(value +/-)	value	+	-
Actuation Gain, Hat (N/V^{**2})	2.867e-11		1.275e-14 (0.04%)	1.281e-14 (0.04%)
Residual time delay, tau_A (s)	2.774e-07		8.778e-07 (316.43%)	8.688e-07 (313.16%)

20250719T225903Z EX L3 actuation
MCMC corner plot

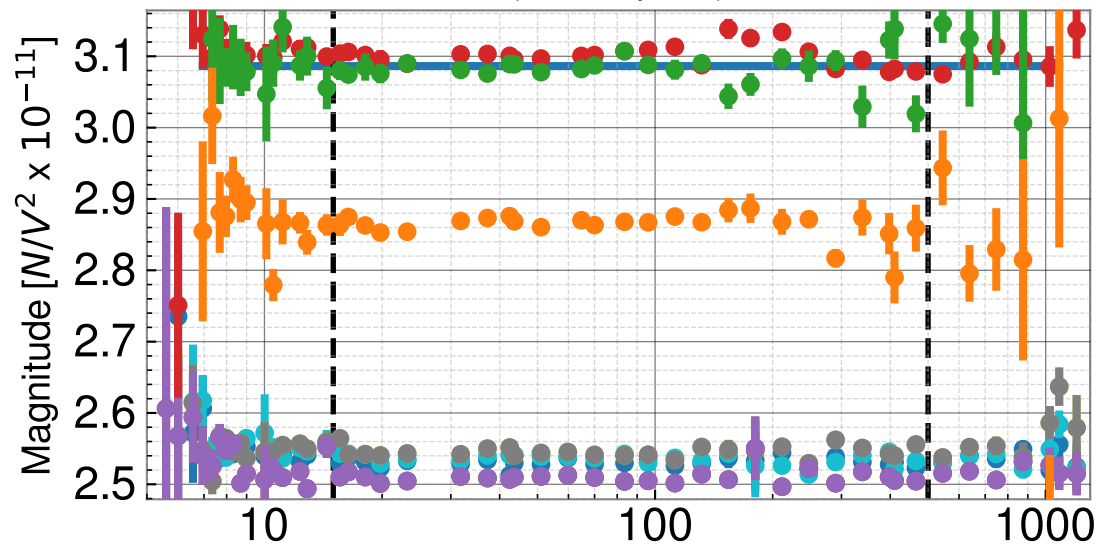


H1SUSEX L3 actuation model history (last 9 measurements)

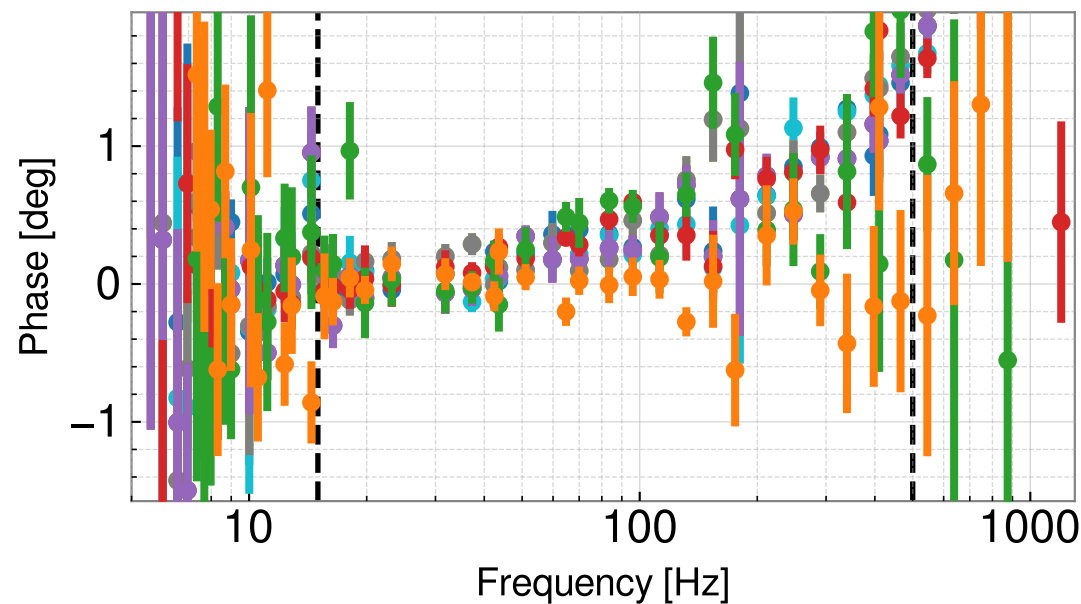
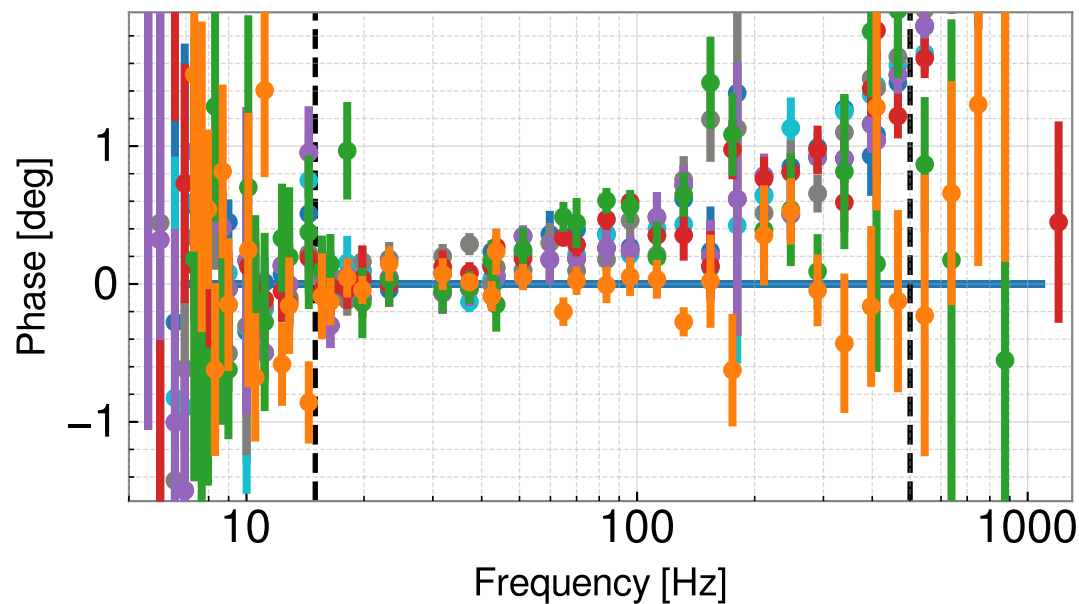
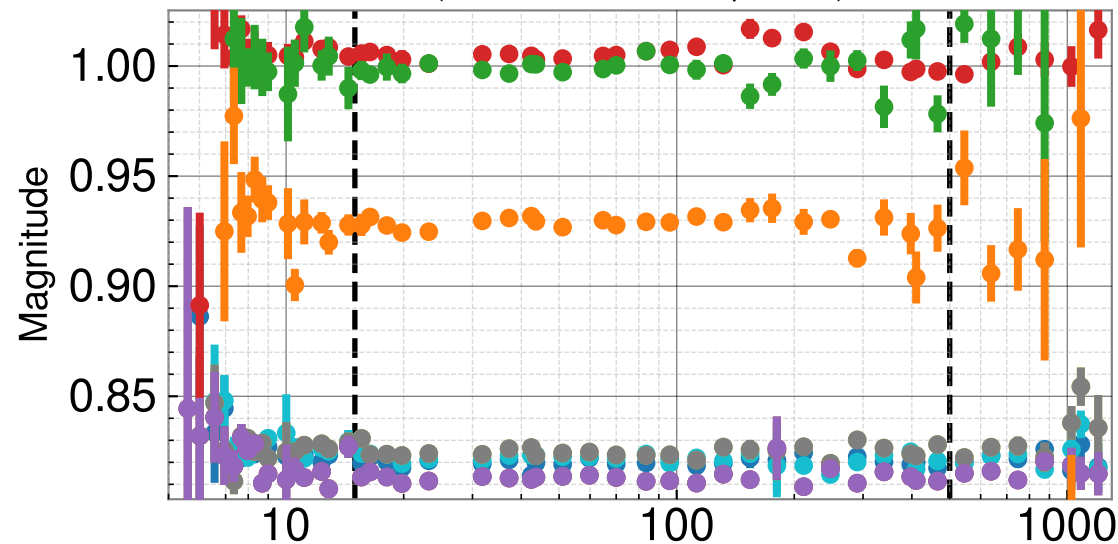
All fixed parameters drawn from /ligo/groups/cal/H1/reports/20250719T225835Z/pydarm_H1.ini



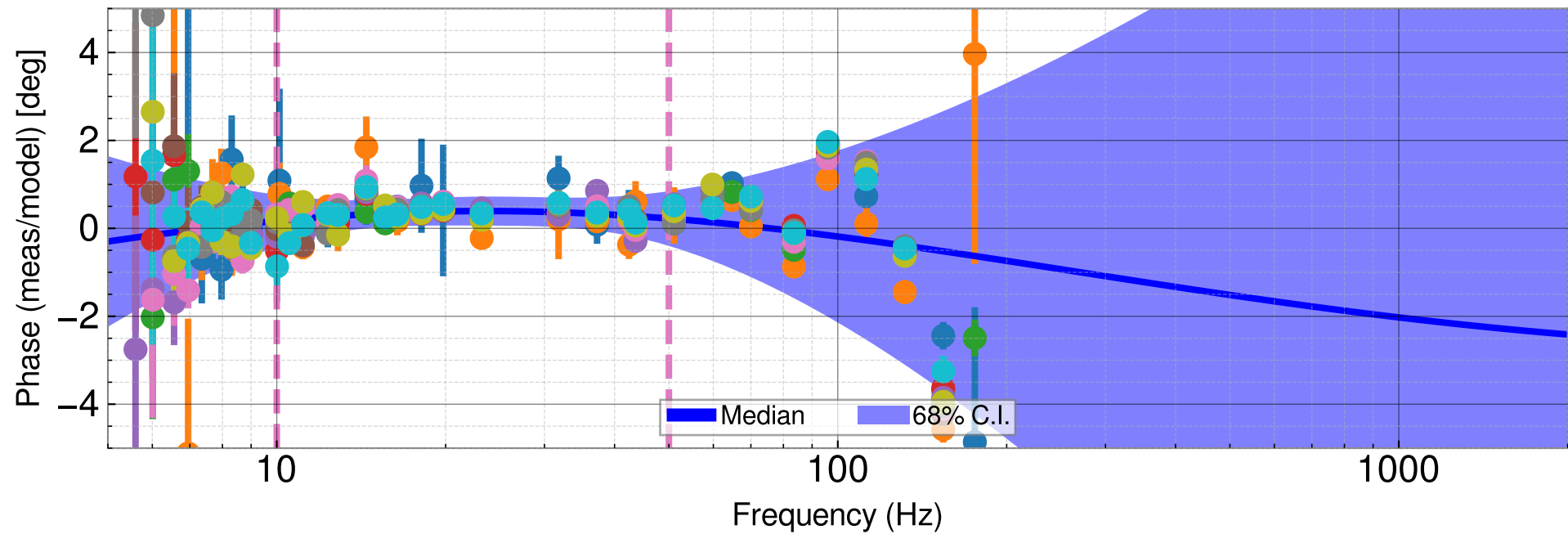
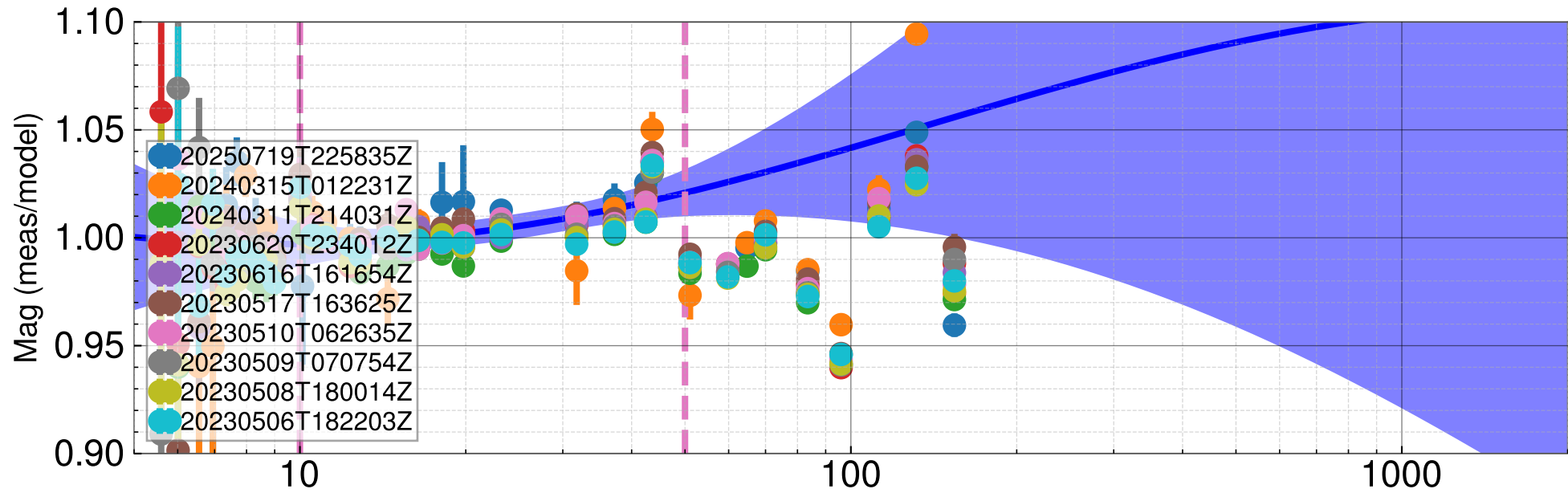
Actuation strength transfer functions
(scaled by H_{ref})



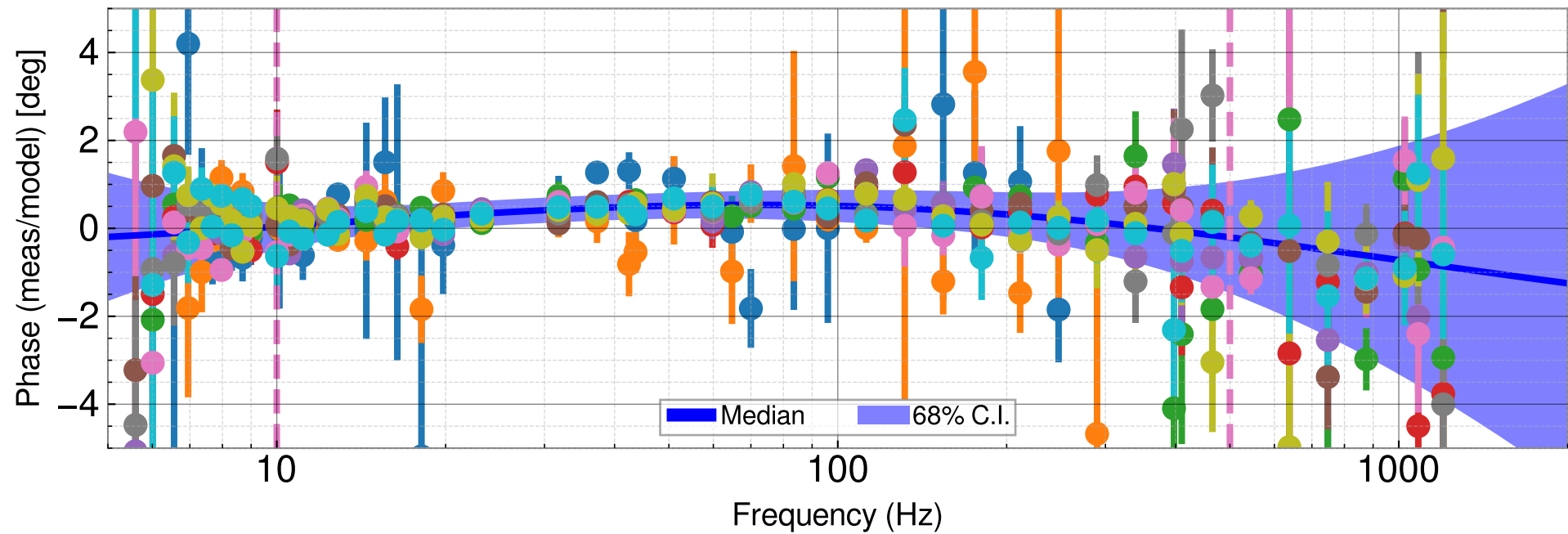
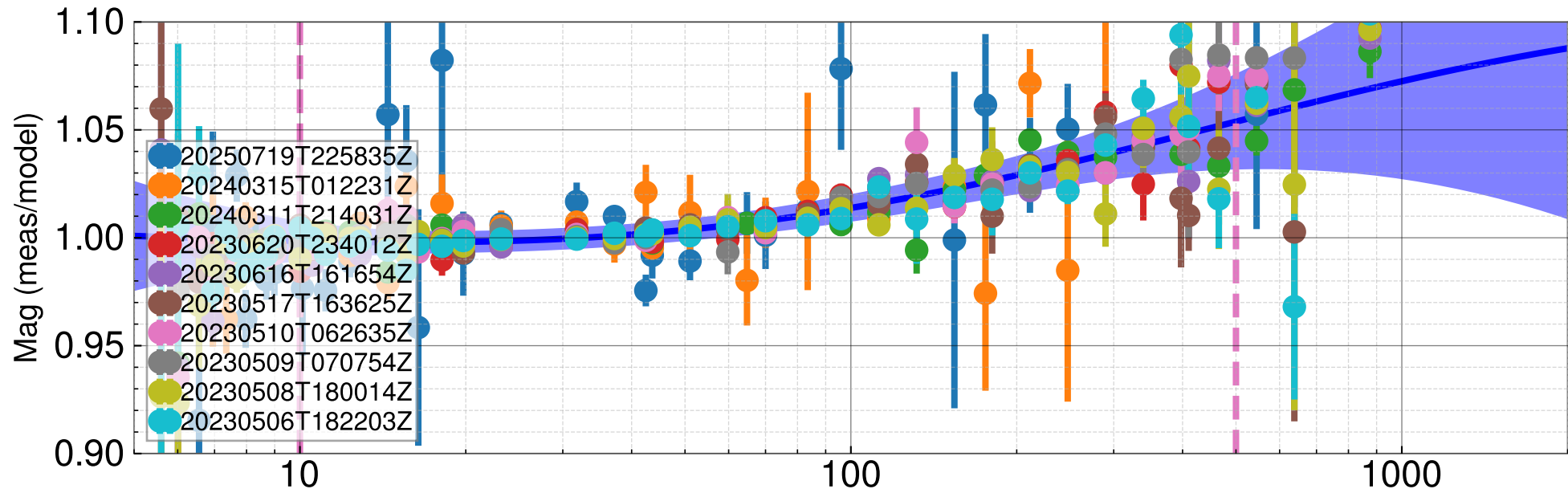
Actuation strength residuals
(meas./model w. free params)



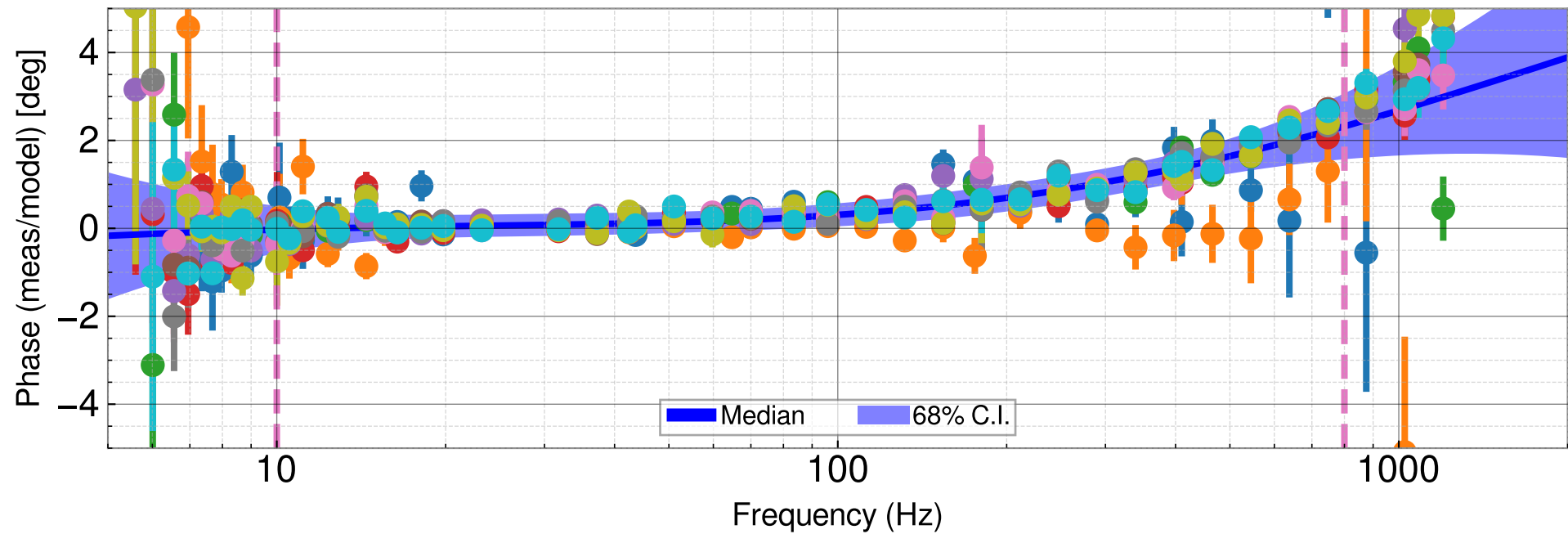
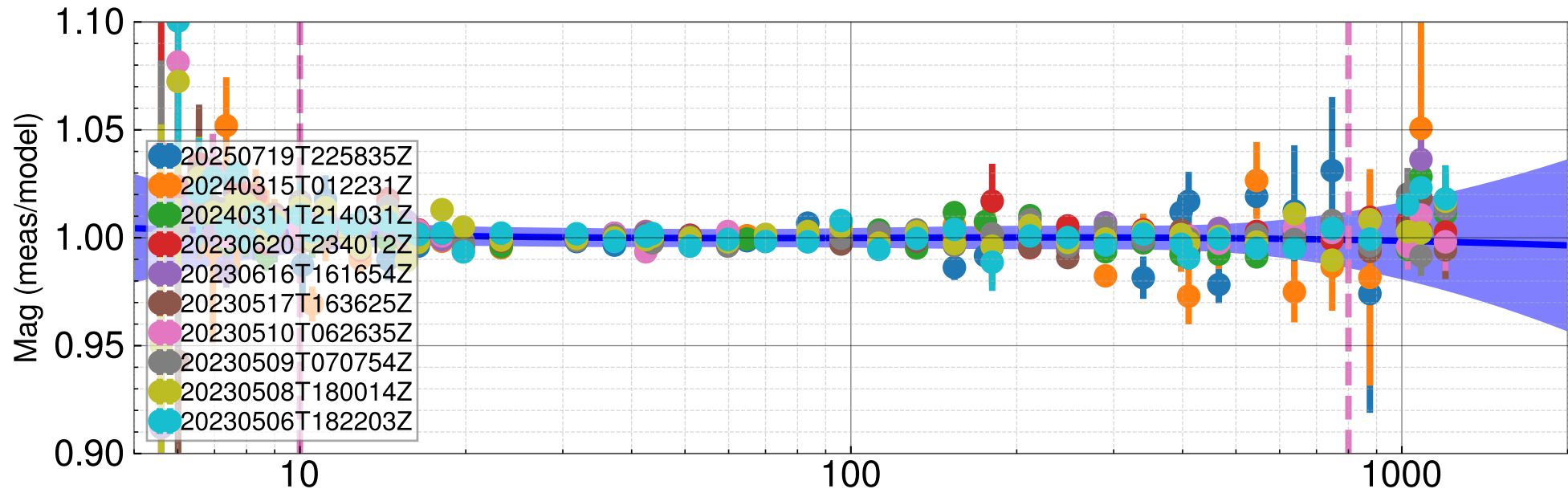
Actuation/L1/EX GPR



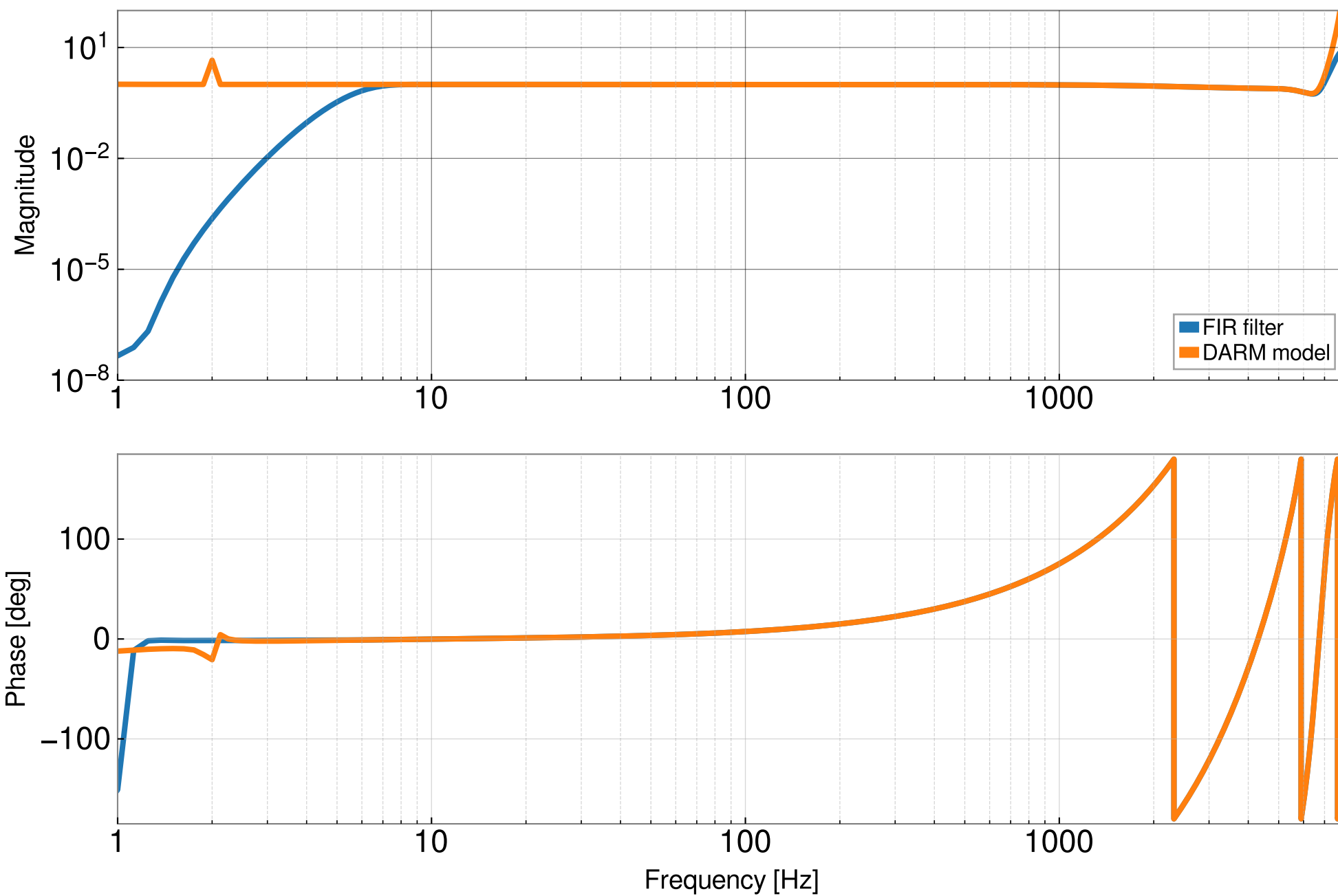
Actuation/L2/EX GPR



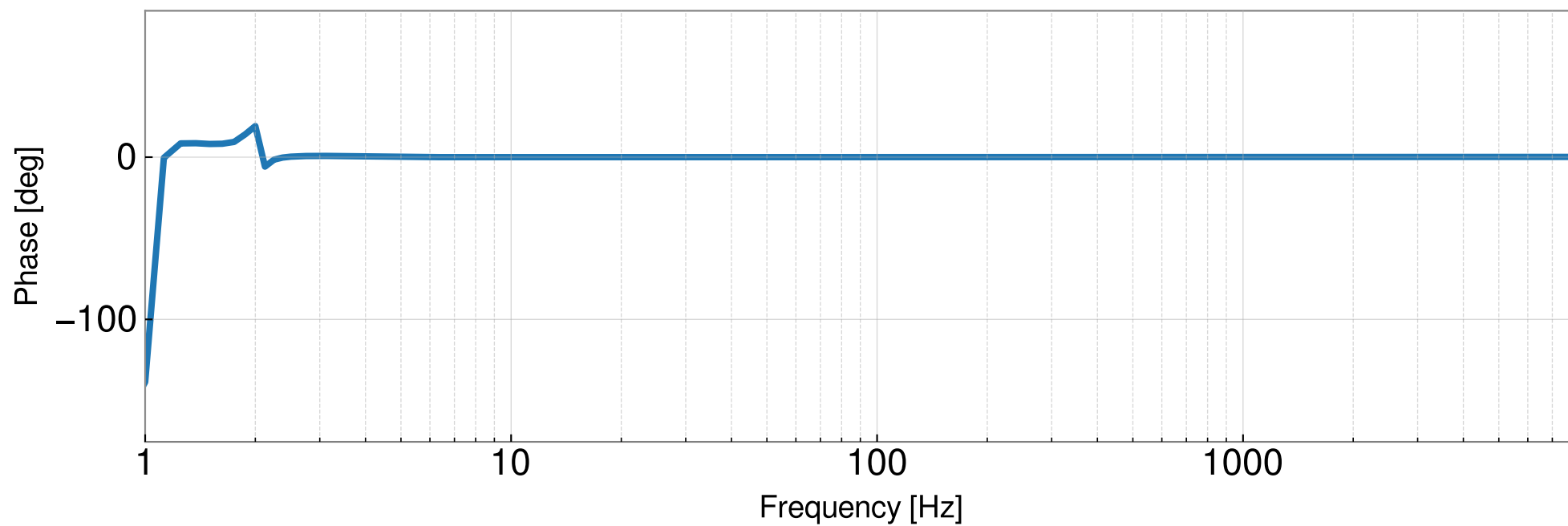
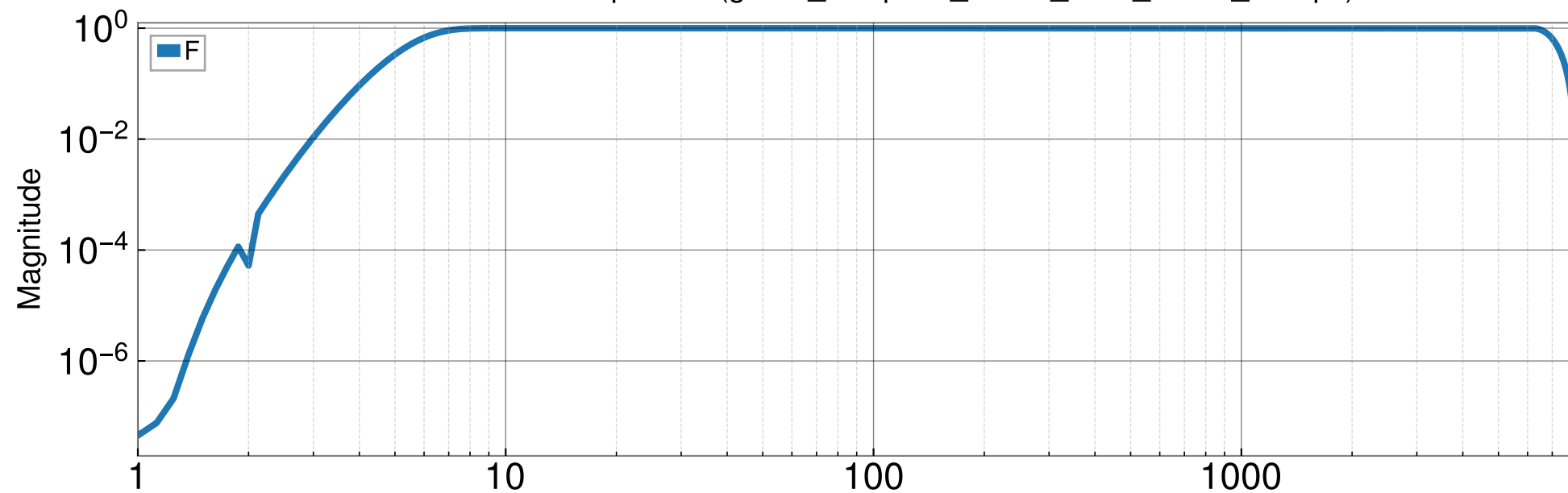
Actuation/L3/EX GPR

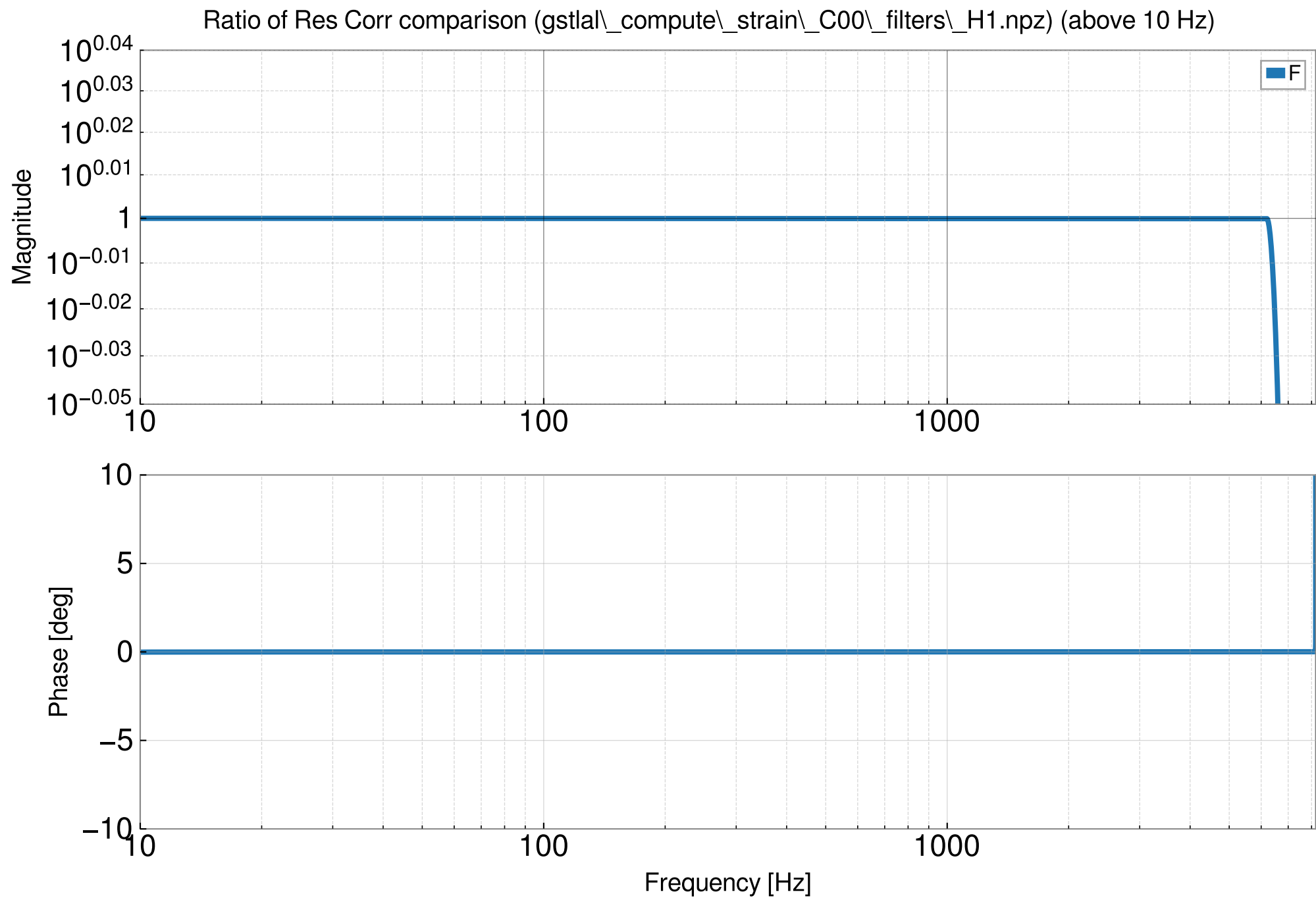


Res Corr comparison (gstlal_compute_strain_C00_filters_H1.npz)



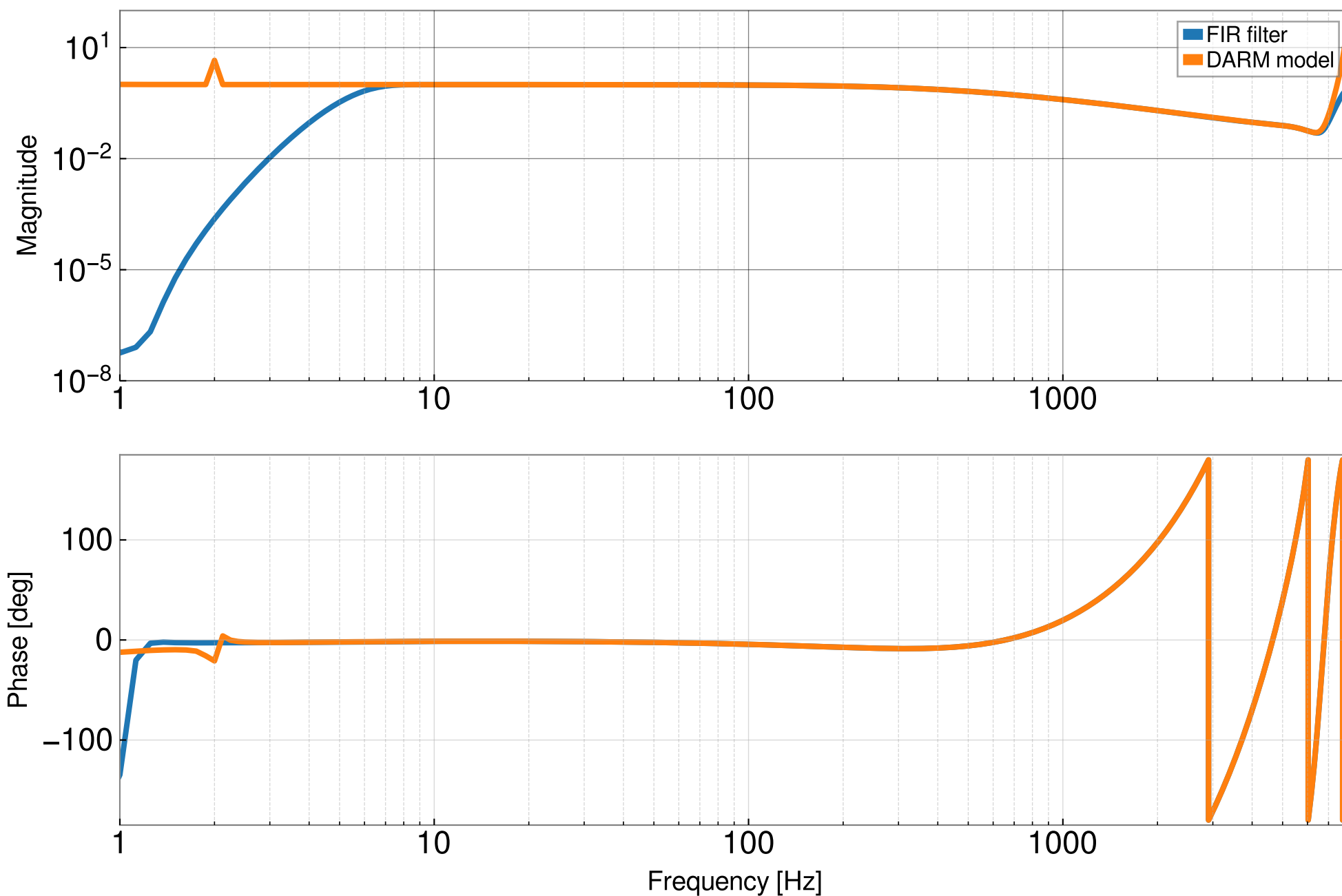
Ratio of Res Corr comparison (gstlal_compute_strain_C00_filters_H1.npz)





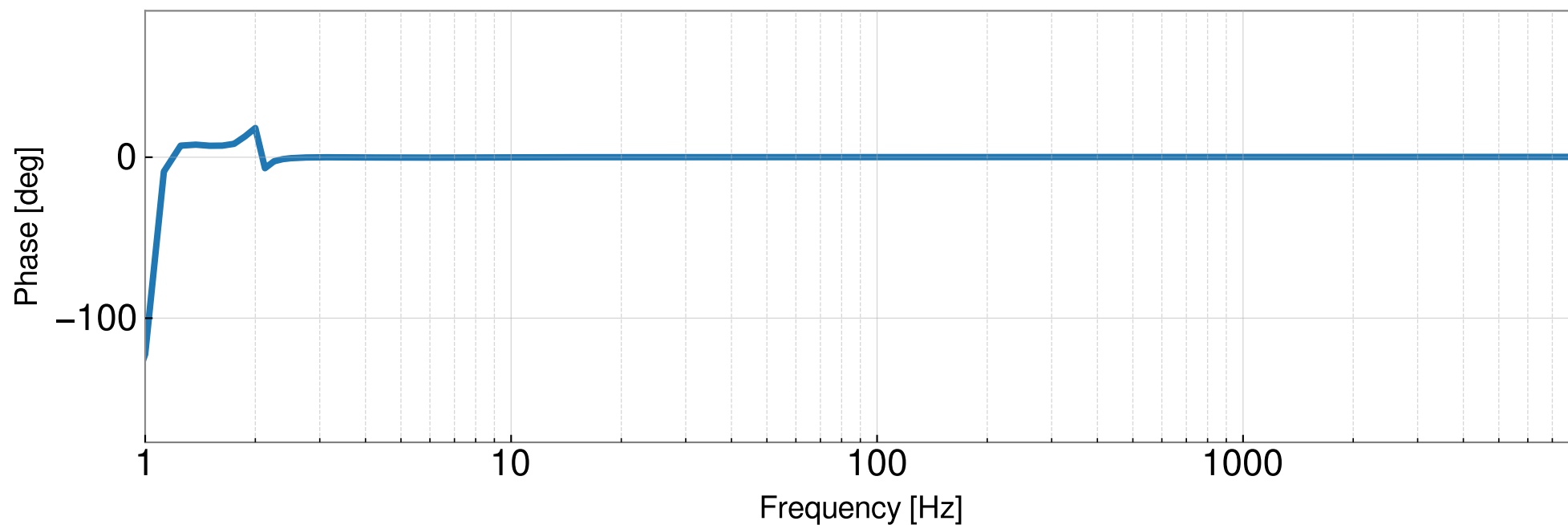
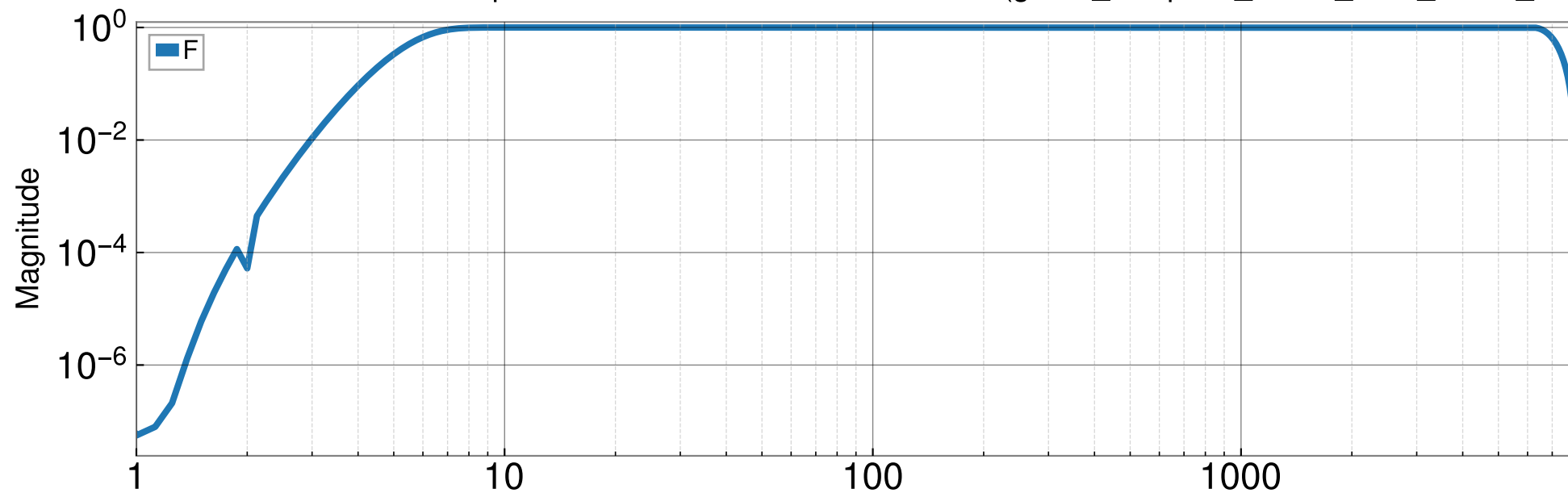
Res Corr No CC Pole comparison

(gstlal_compute_strain_C00_filters_H1.npz)



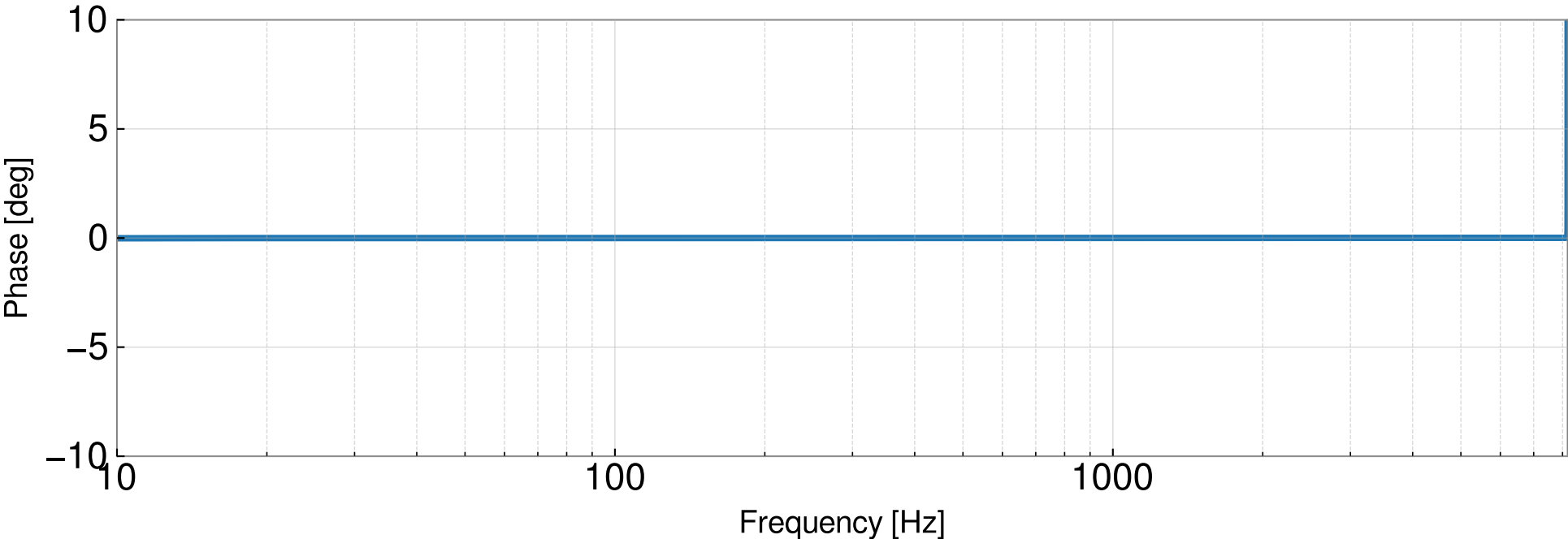
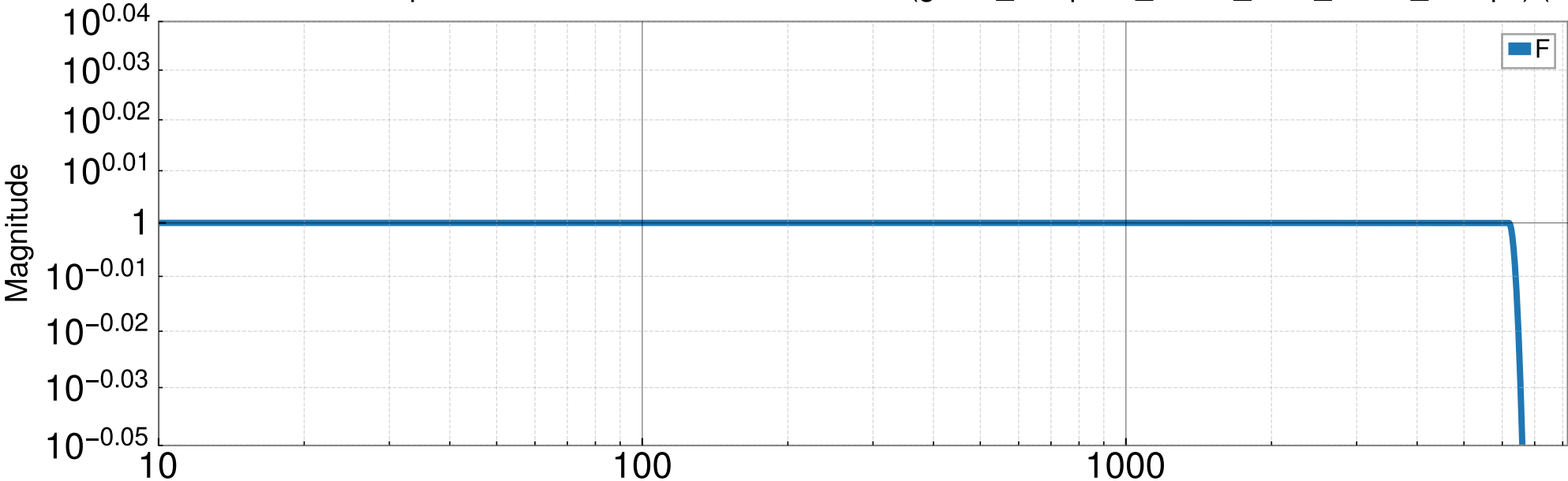
Ratio of Res Corr No CC Pole comparison

(gstla\compute_strain_C00_filters_H1.npz)



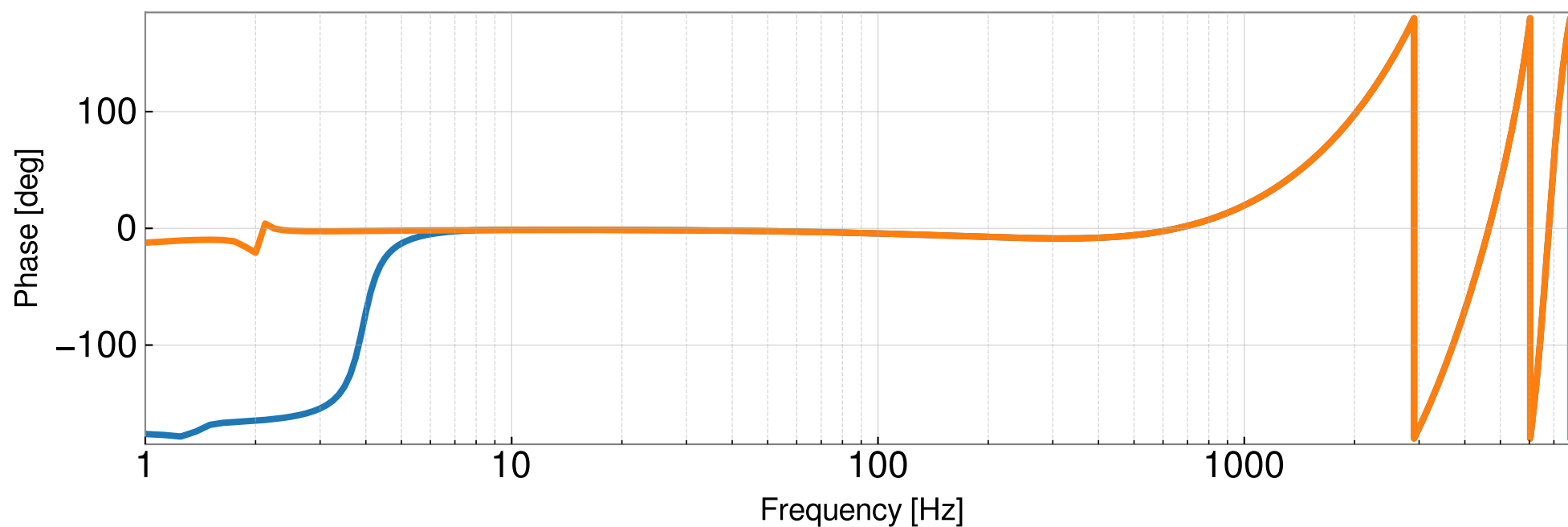
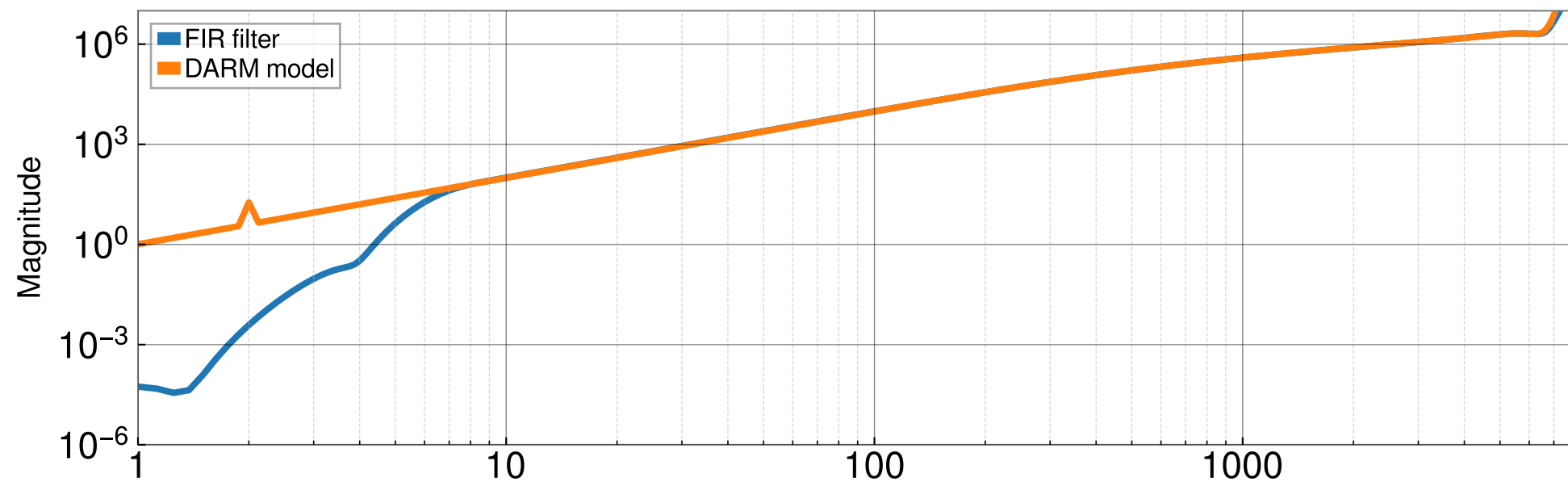
Ratio of Res Corr No CC Pole comparison

(gstlal_compute_strain_C00_filters_H1.npz) (above 10 Hz)



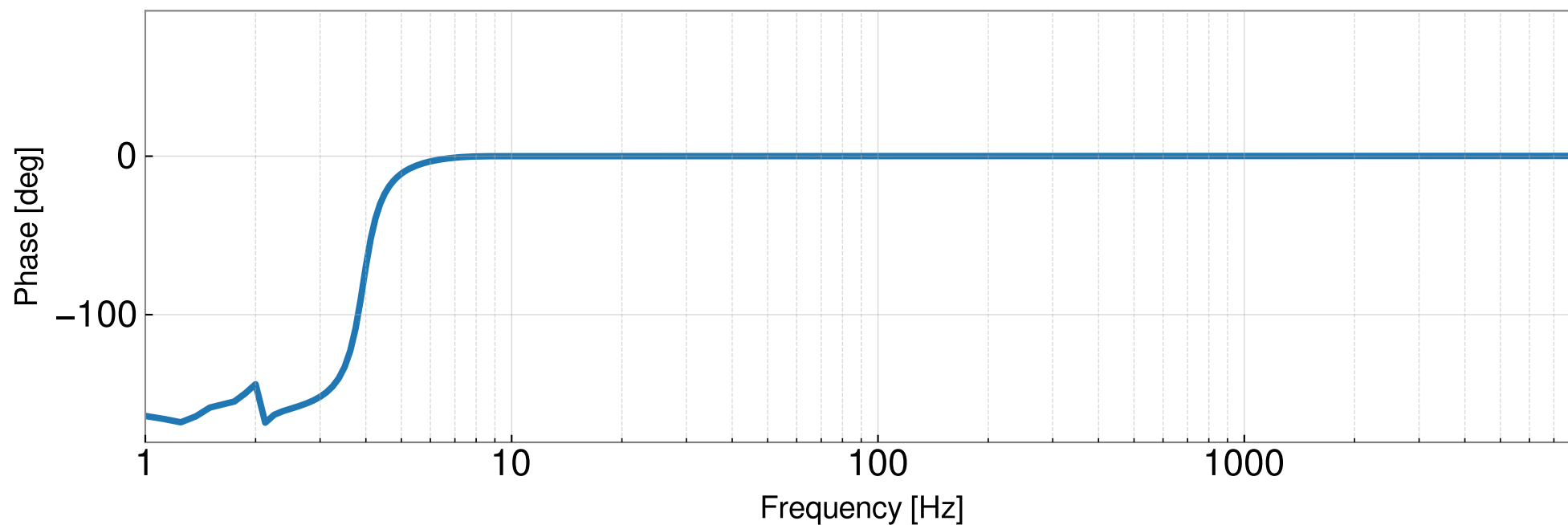
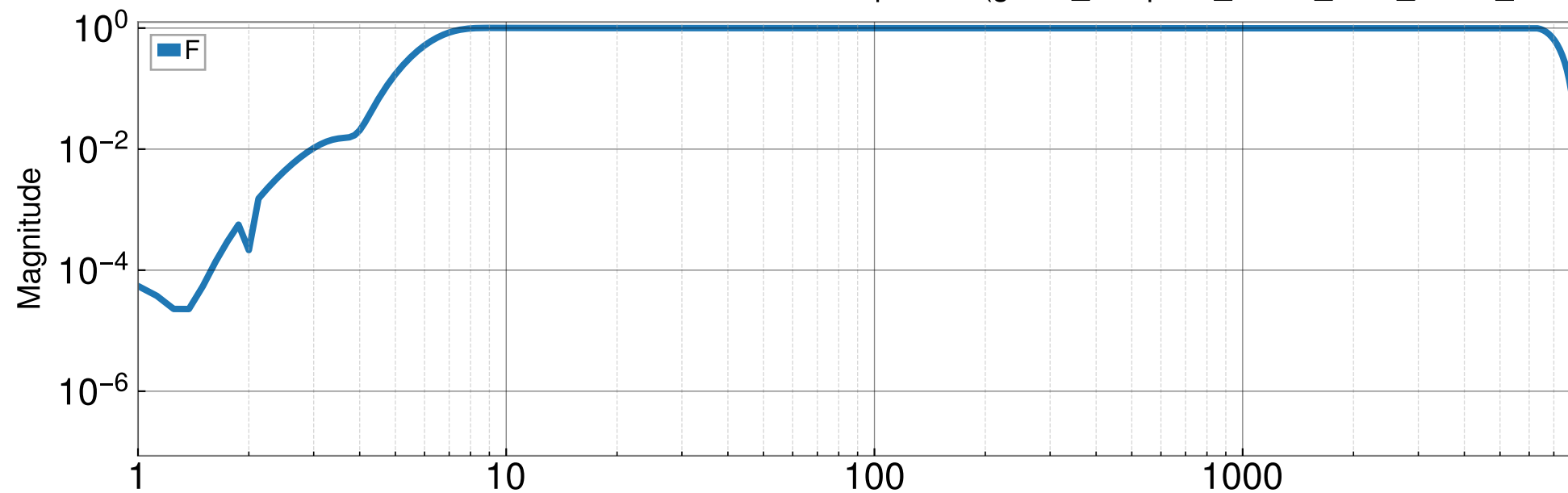
Res Corr No Pole

comparison (gstlal_compute_strain_C00_filters_H1.npz)

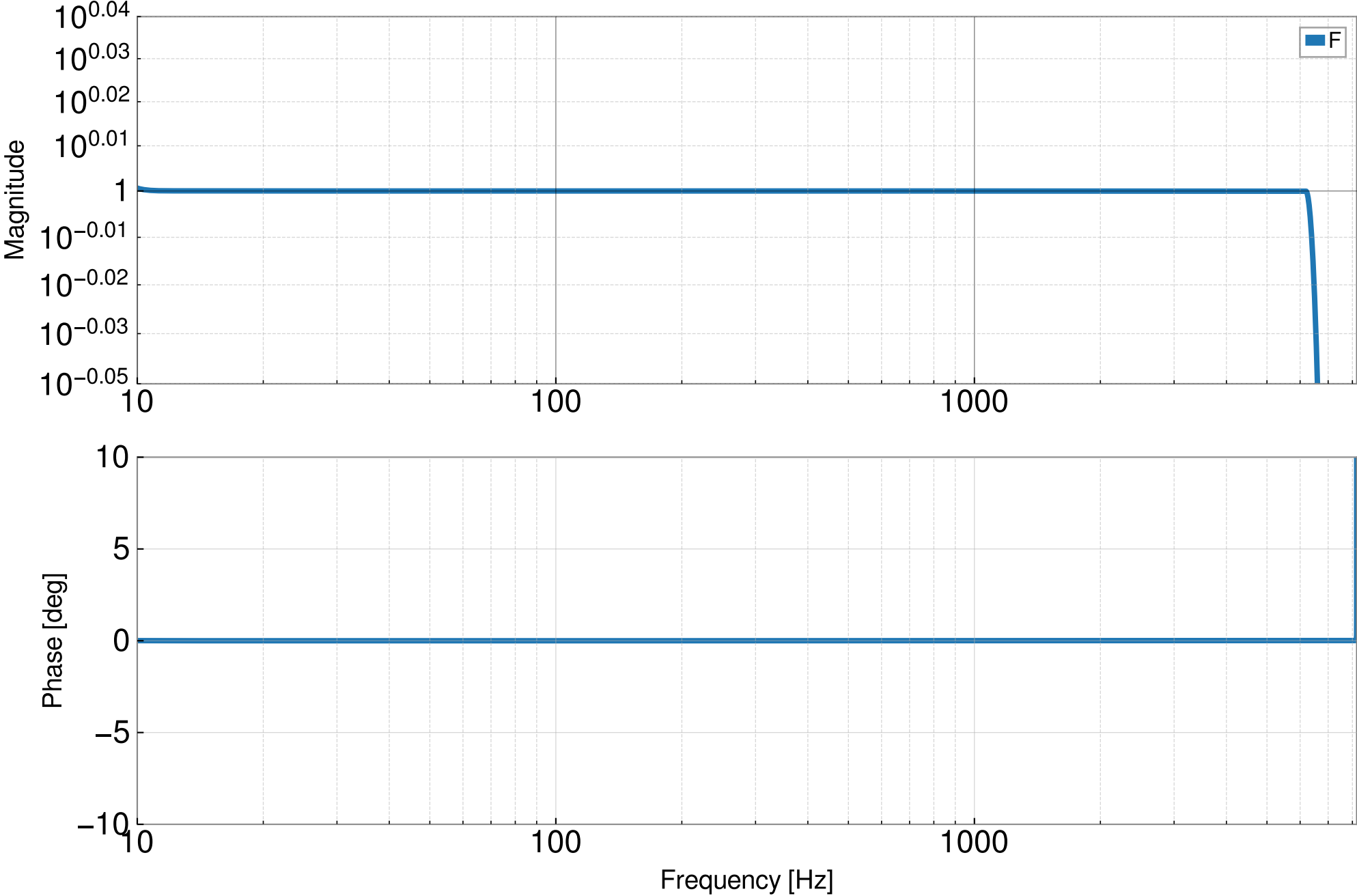


Ratio of Res Corr No Pole

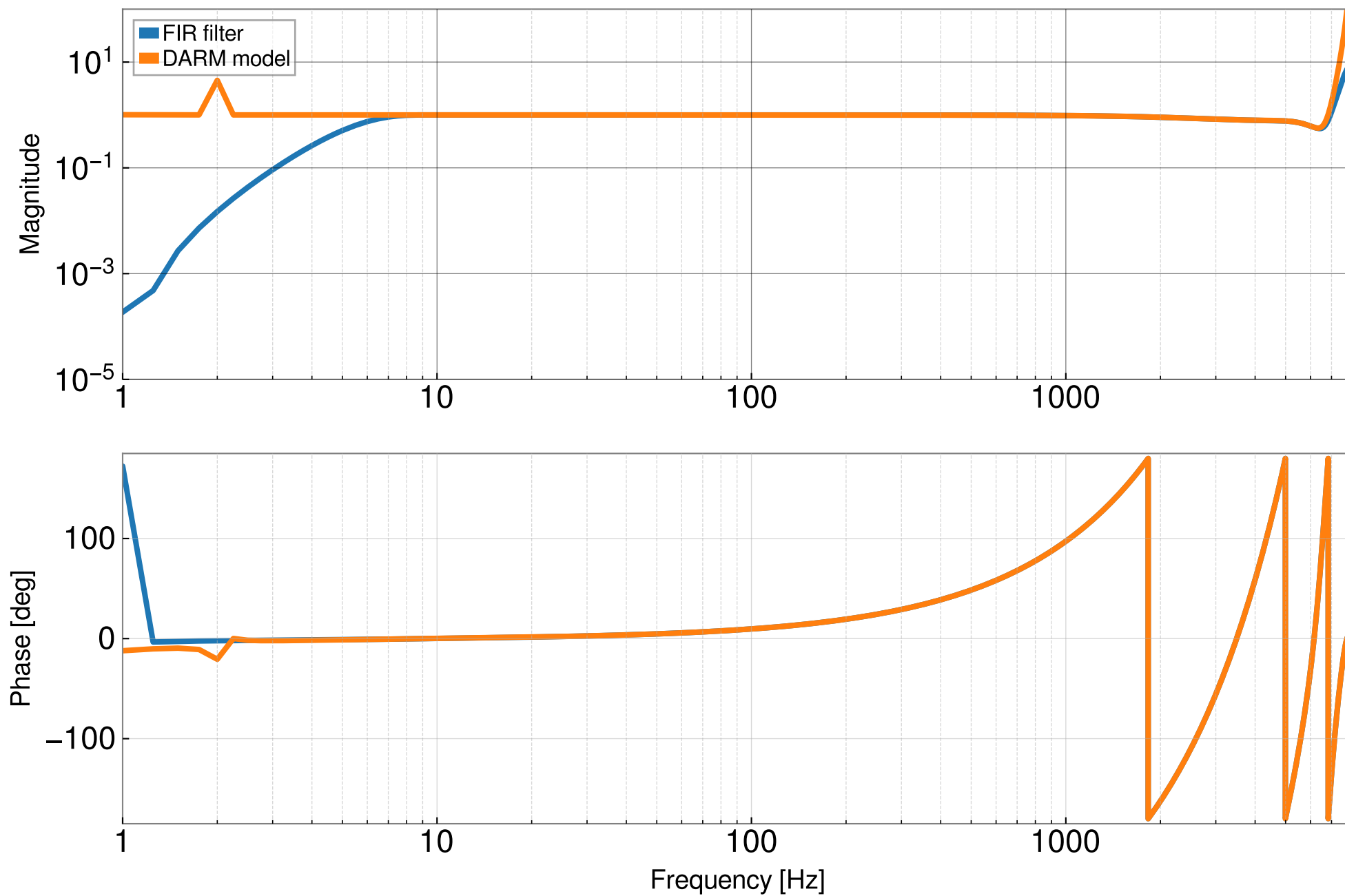
comparison (gstlal_compute_strain_C00_filters_H1.npz)



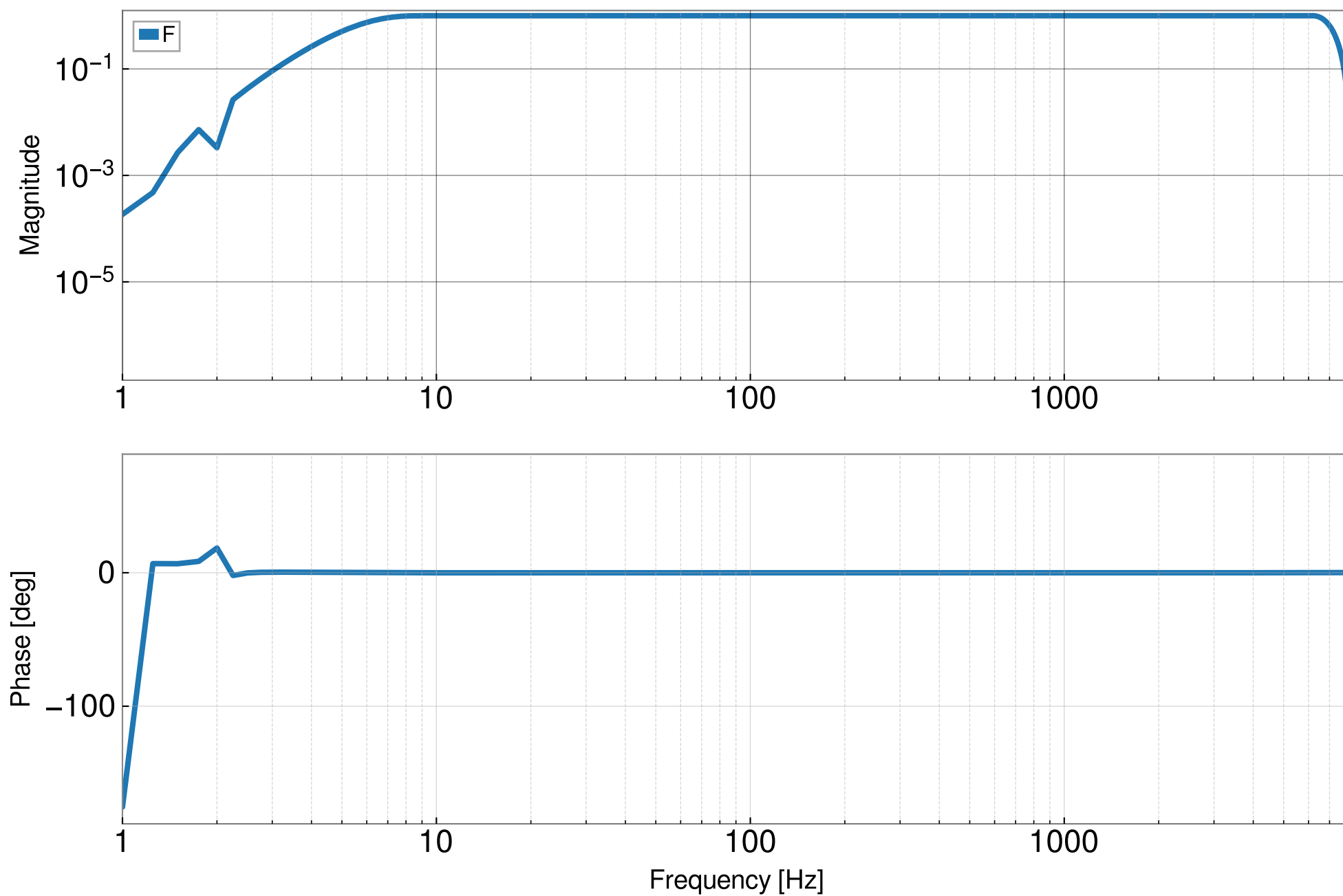
Ratio of Res Corr No Pole comparison (gstlal_compute_strain_C00_filters_H1.npz) (above 10 Hz)

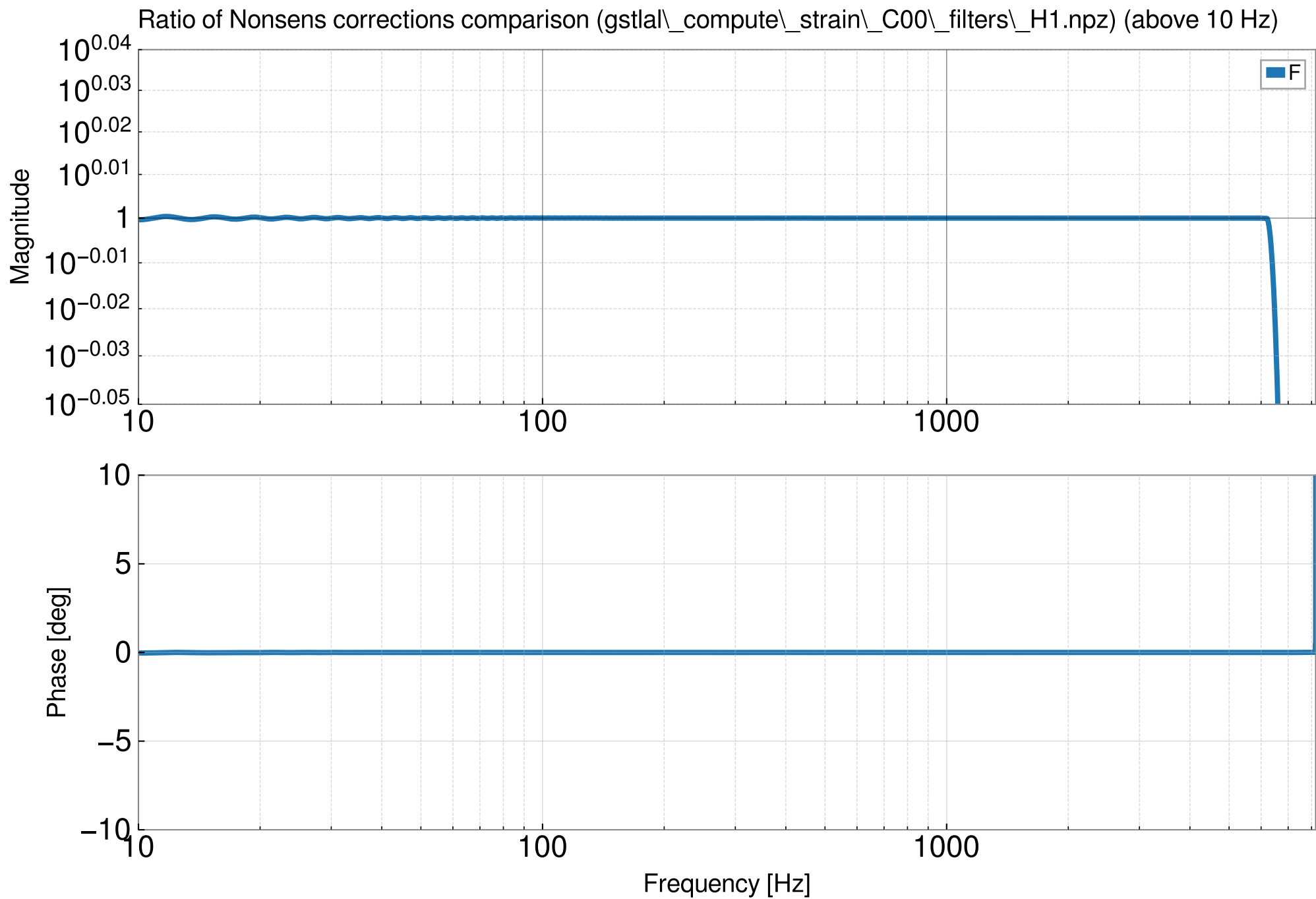


Nonsens corrections comparison (gstlal_compute_strain_C00_filters_H1.npz)

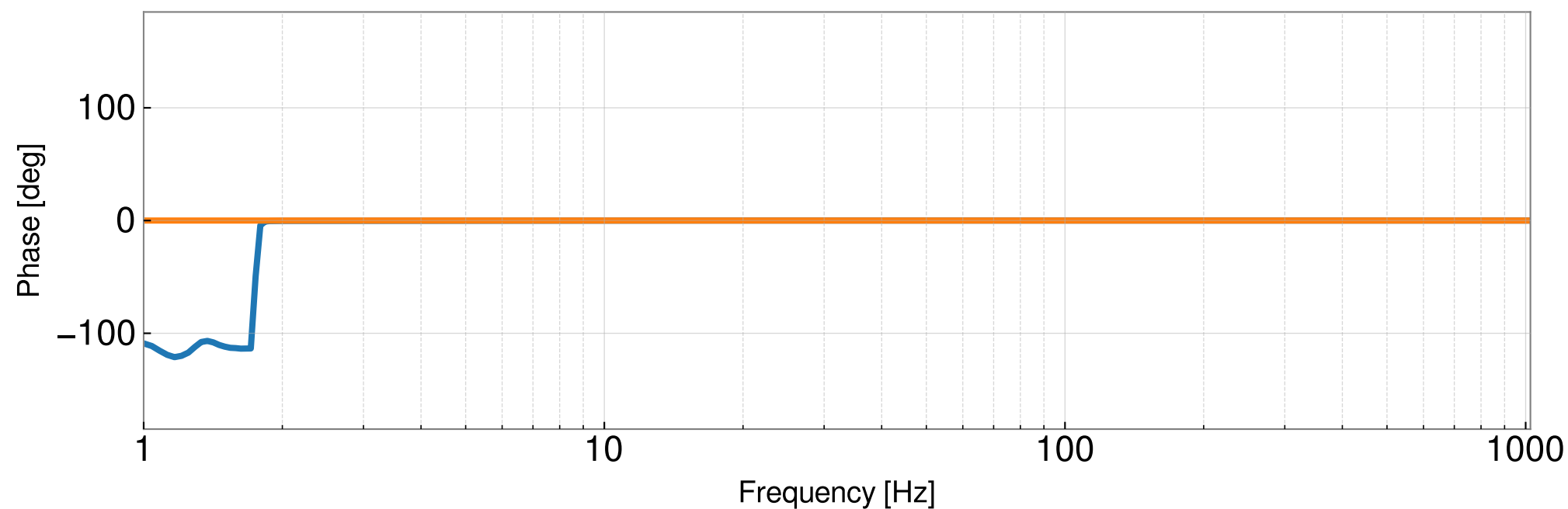
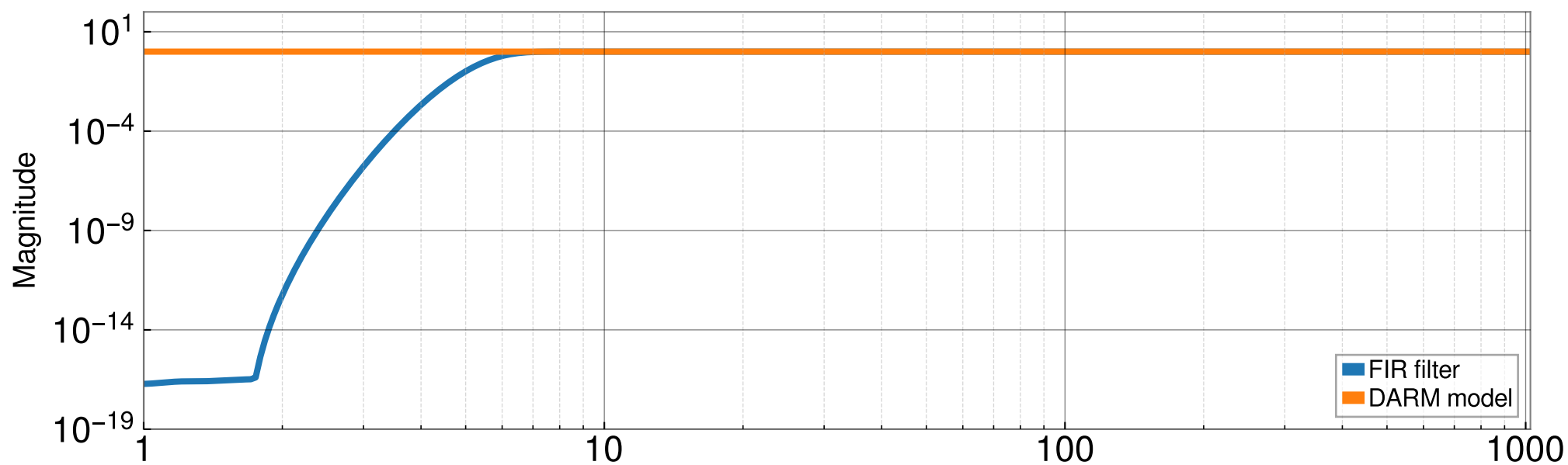


Ratio of Nonsens corrections comparison (gstla\compute_strain_C00_filters_H1.npz)

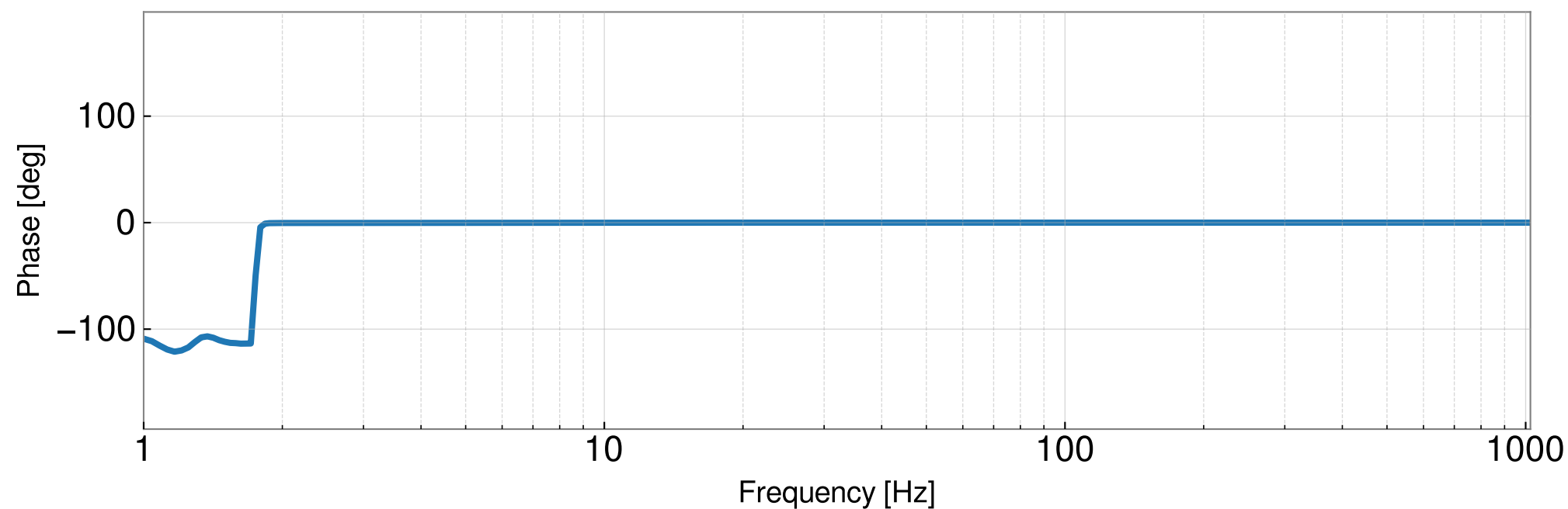
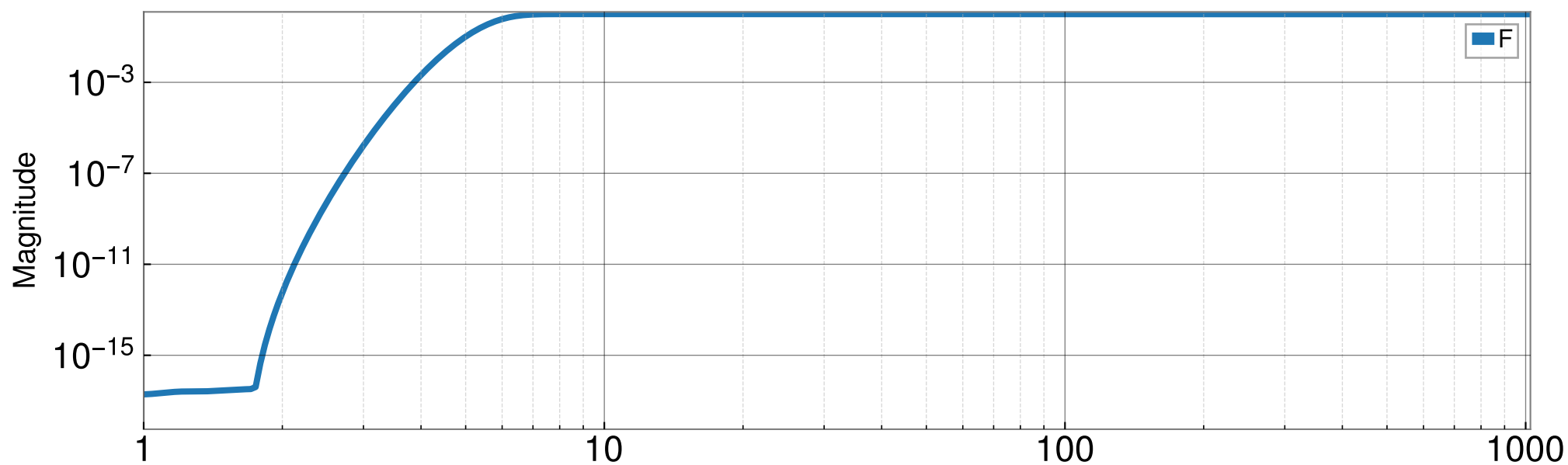


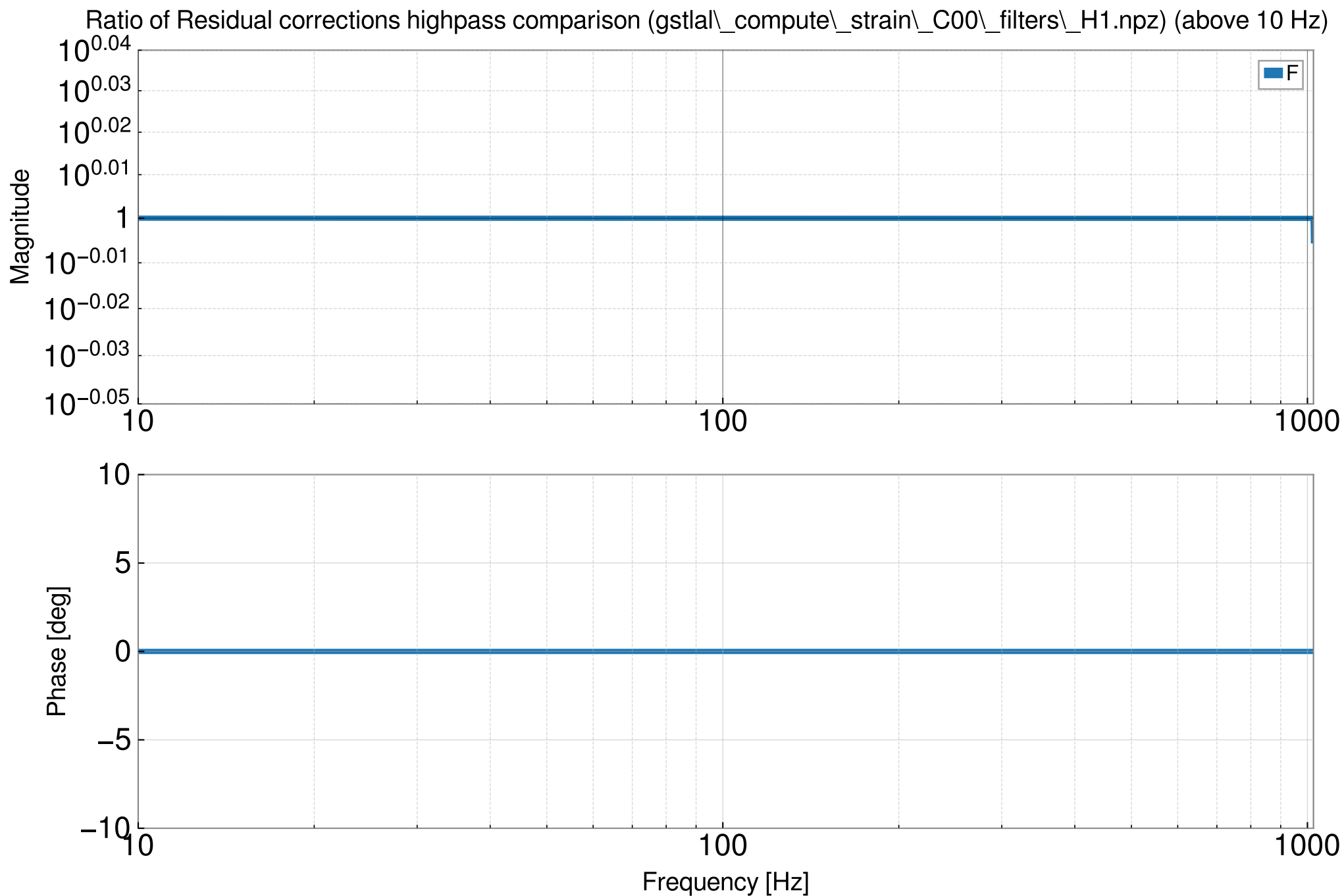


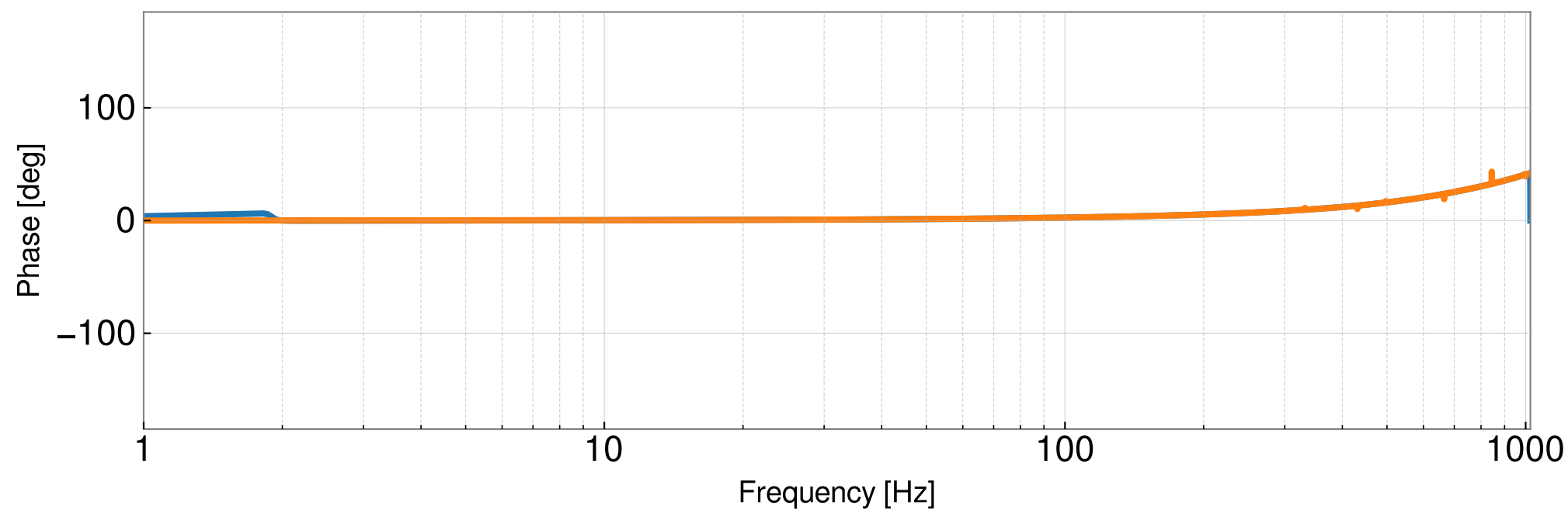
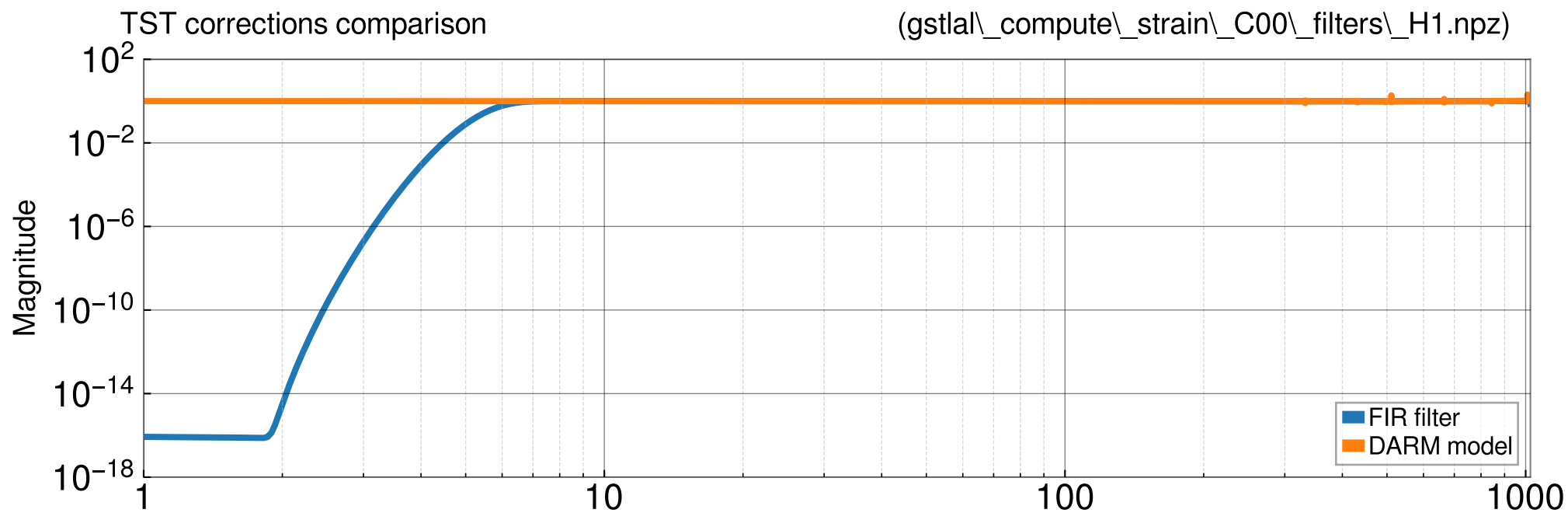
Residual corrections highpass comparison (gstlal_compute_strain_C00_filters_H1.npz)



Ratio of Residual corrections highpass comparison (gstlal_compute_strain_C00_filters_H1.npz)

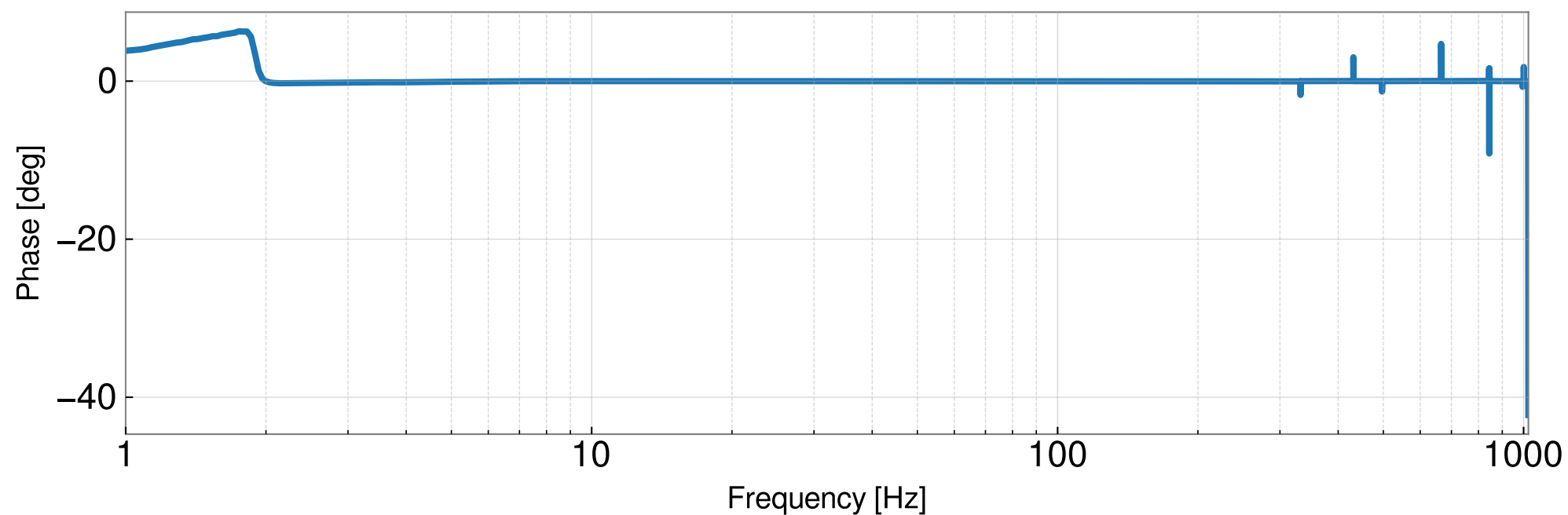
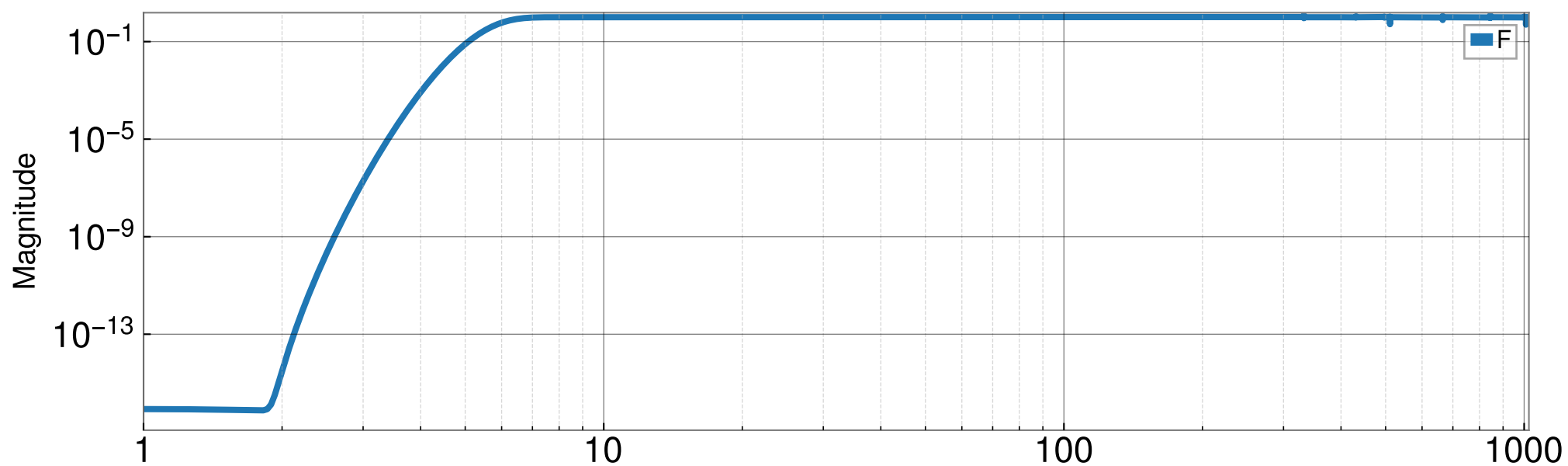






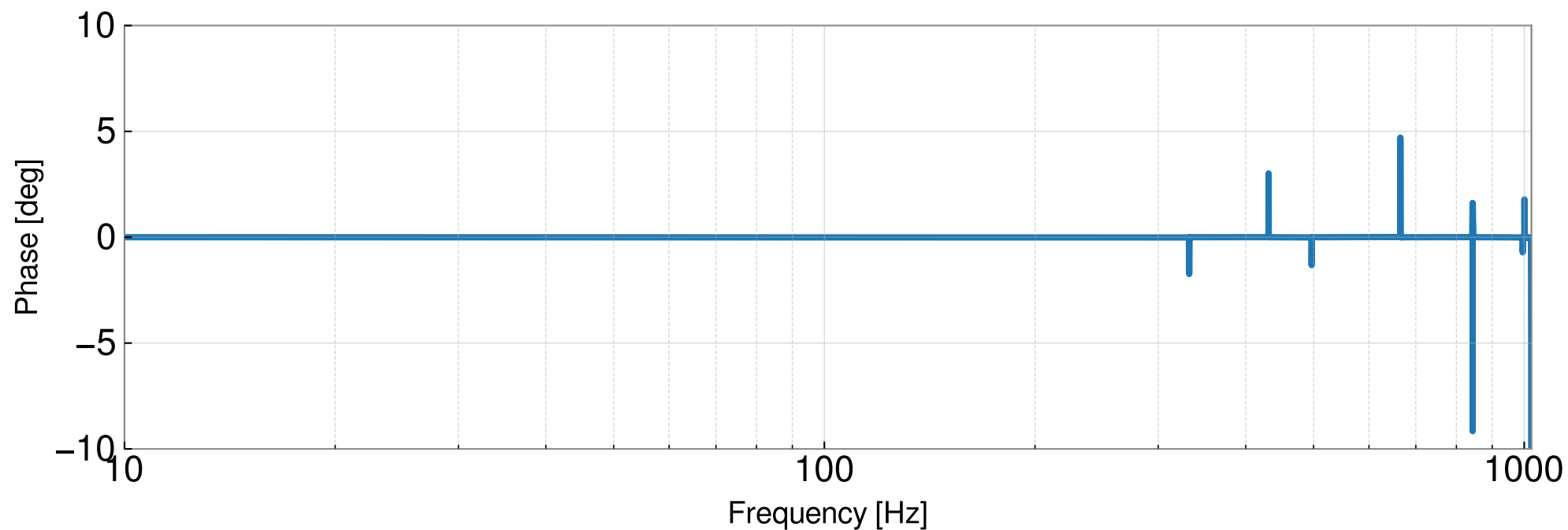
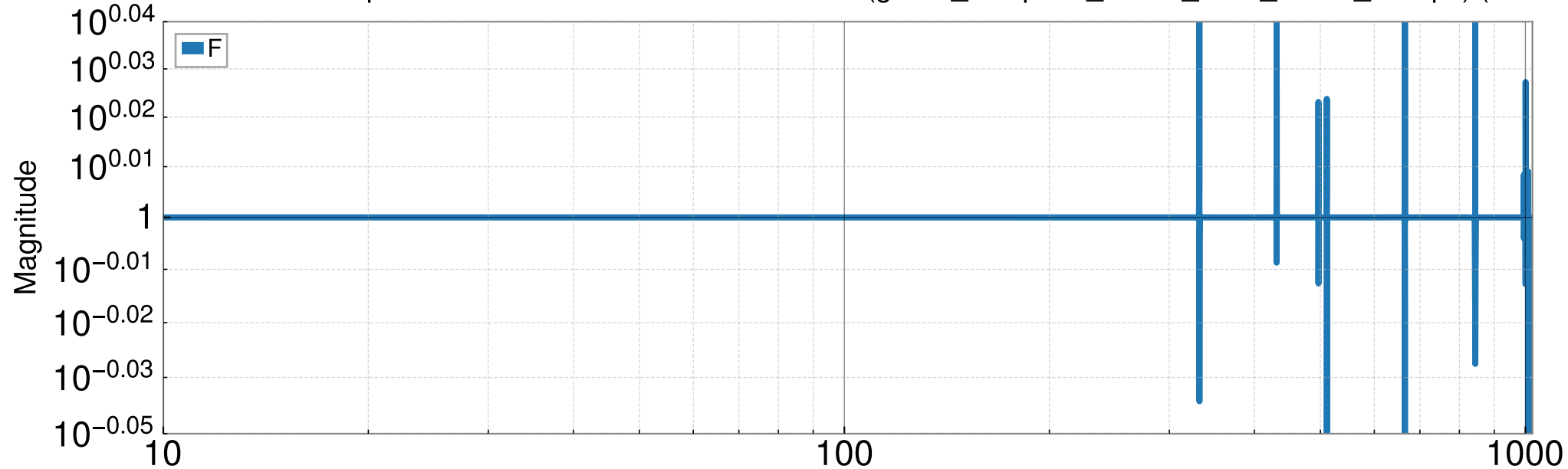
Ratio of TST corrections comparison

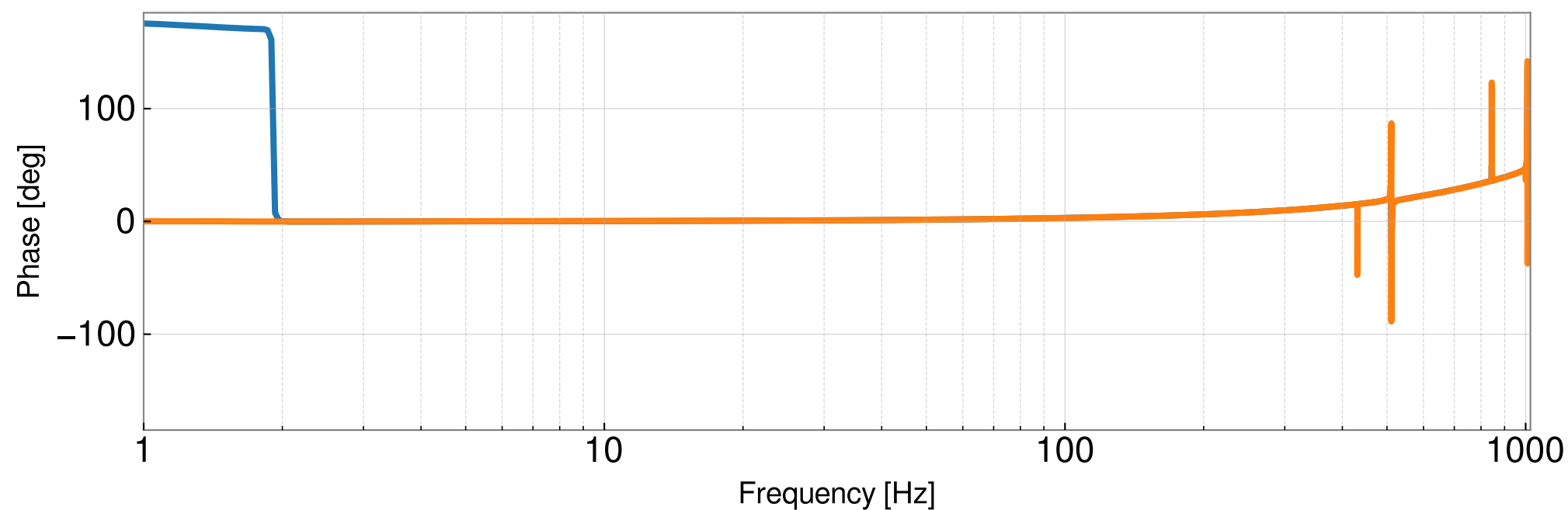
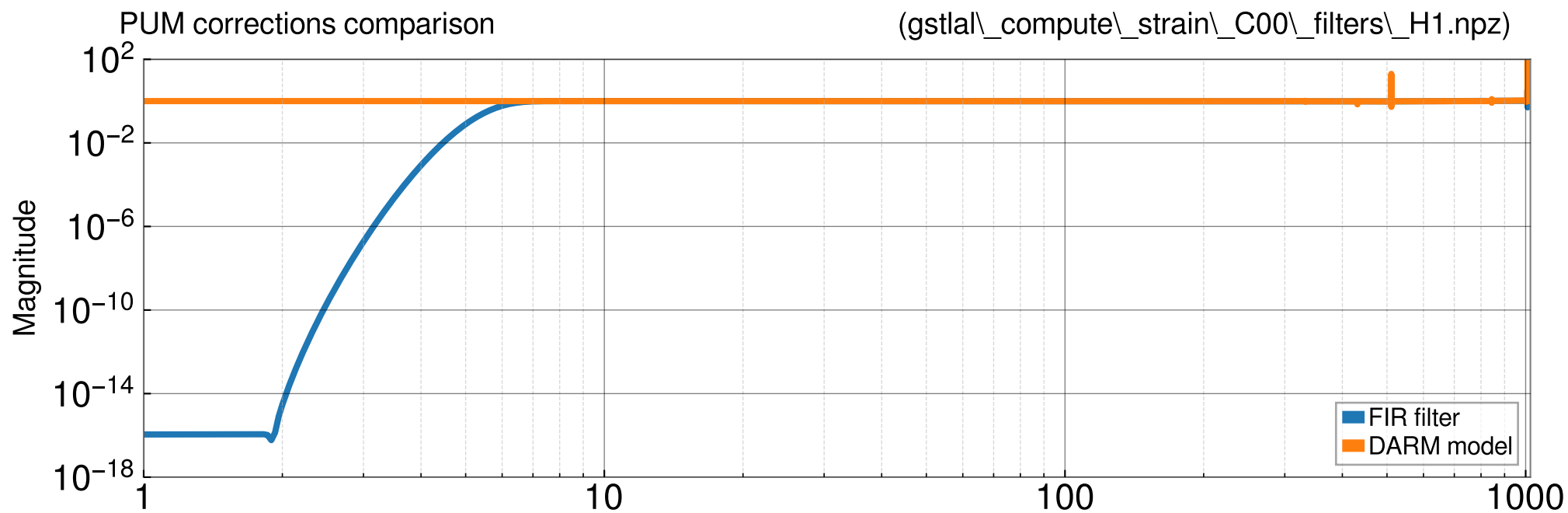
(gstlal_compute_strain_C00_filters_H1.npz)



Ratio of TST corrections comparison

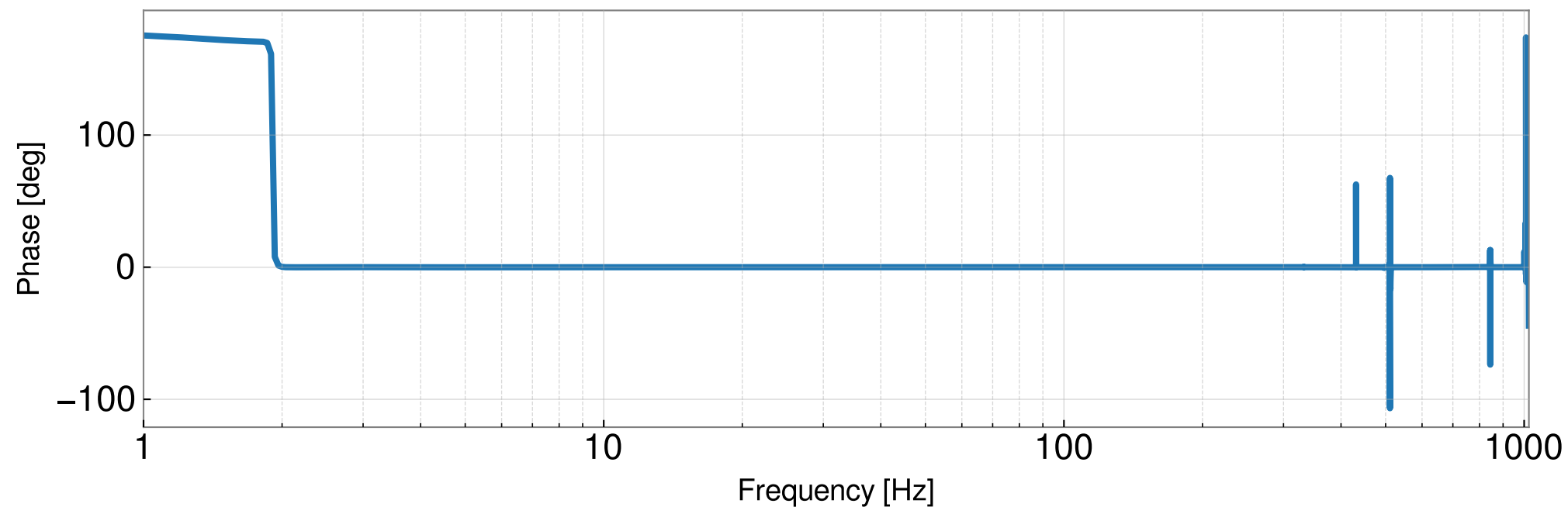
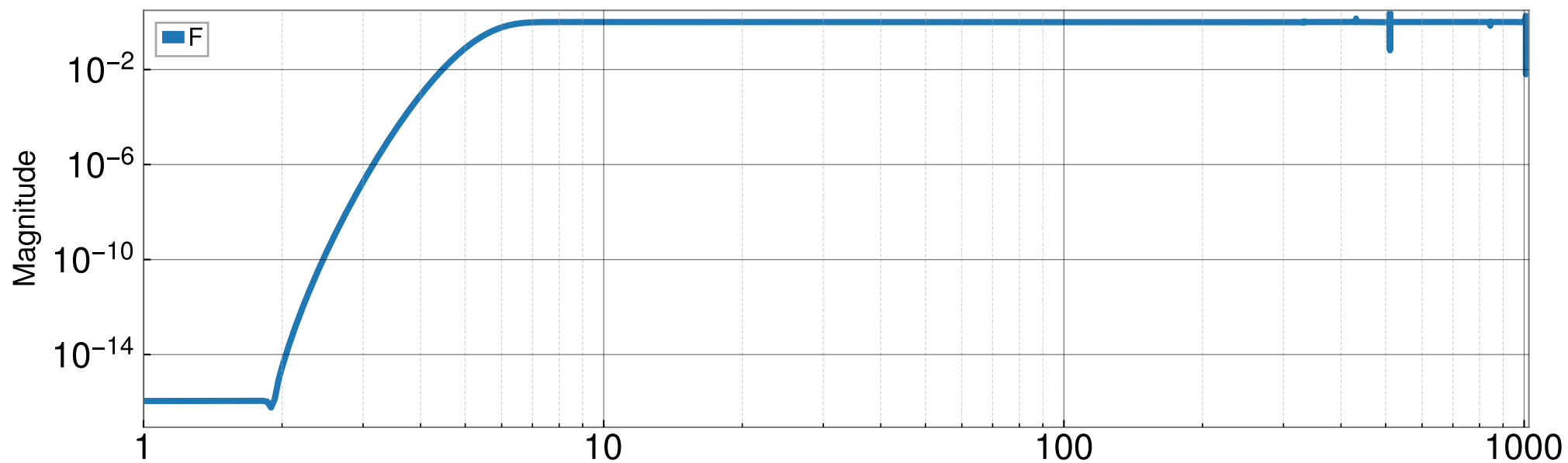
(gstlal_compute_strain_C00_filters_H1.npz) (above 10 Hz)





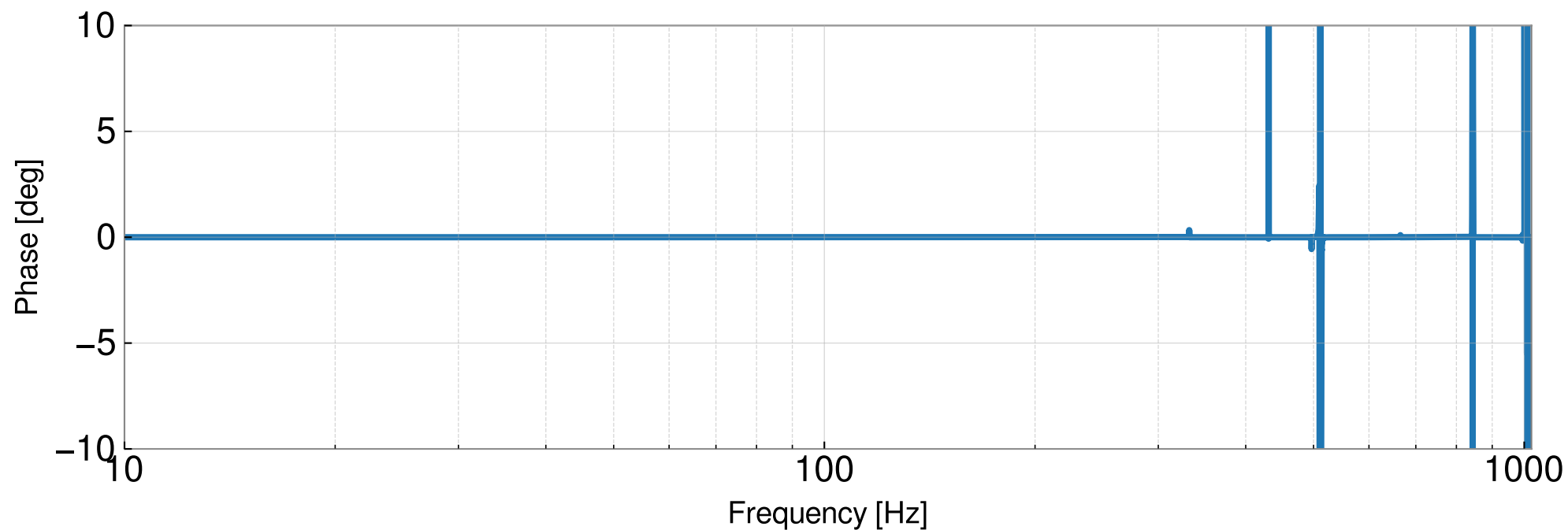
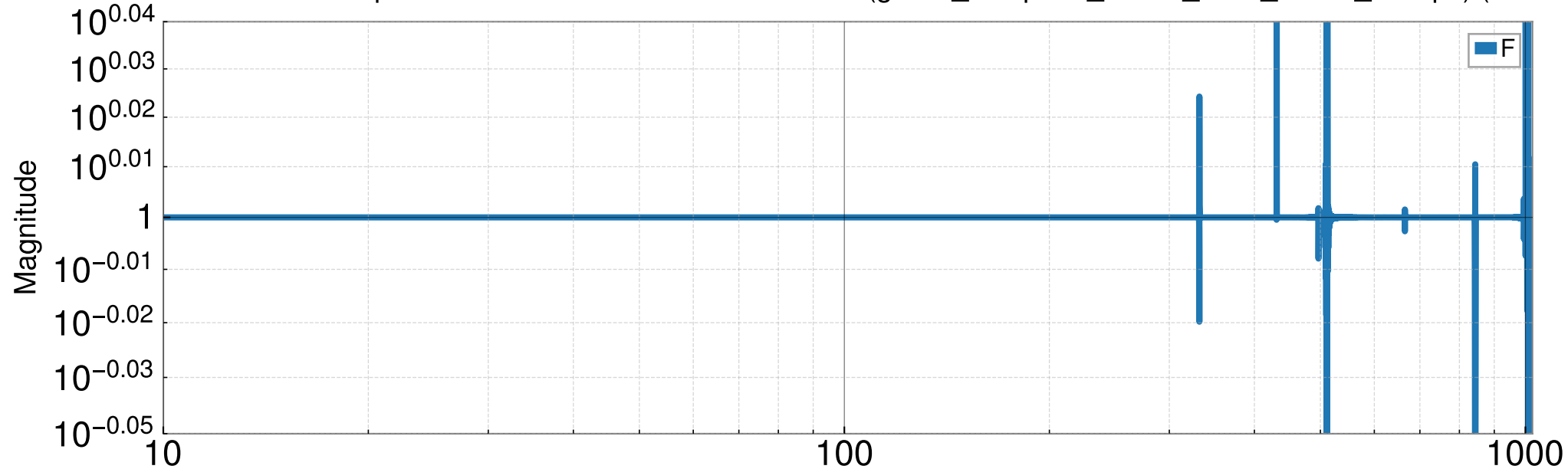
Ratio of PUM corrections comparison

(gstlal_compute_strain_C00_filters_H1.npz)



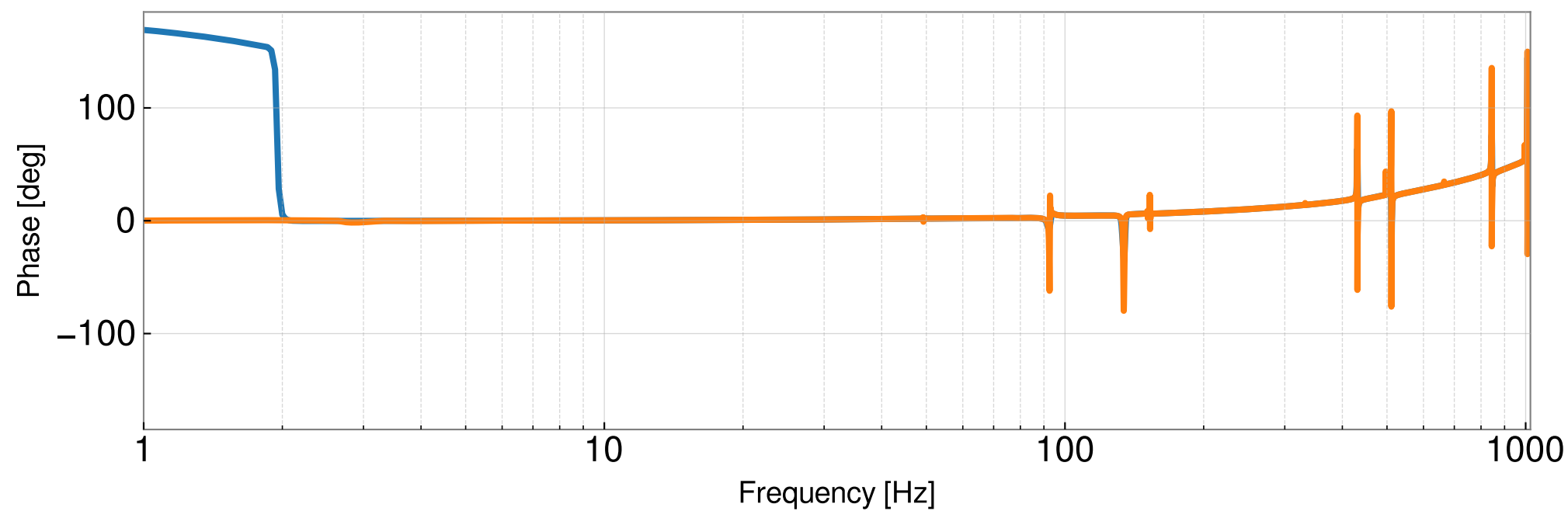
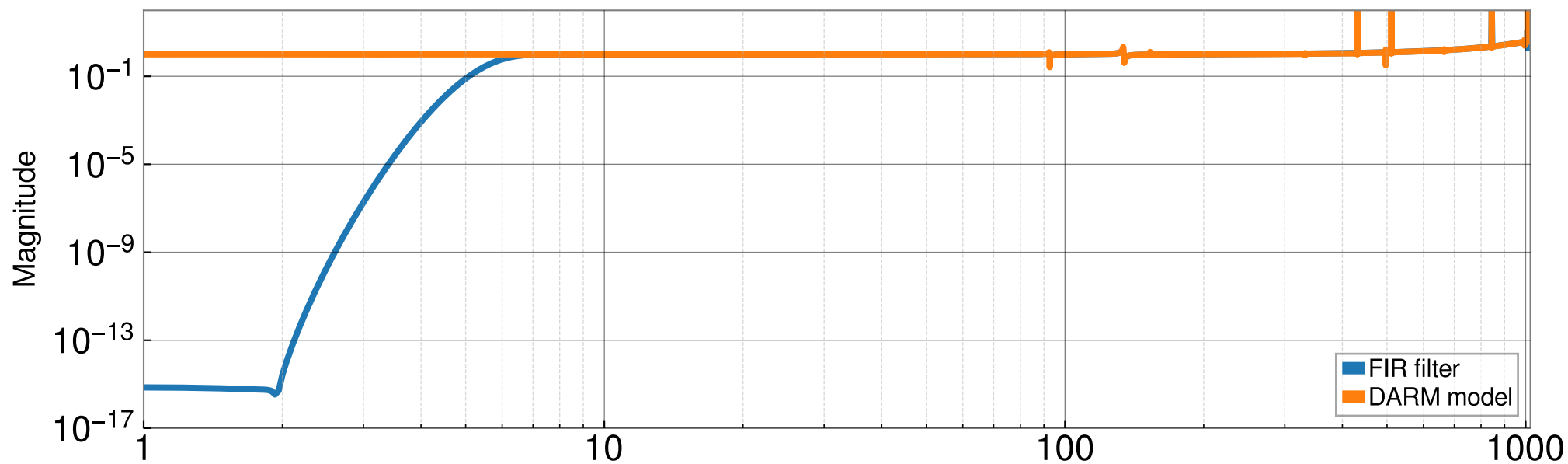
Ratio of PUM corrections comparison

(gstlal_compute_strain_C00_filters_H1.npz) (above 10 Hz)



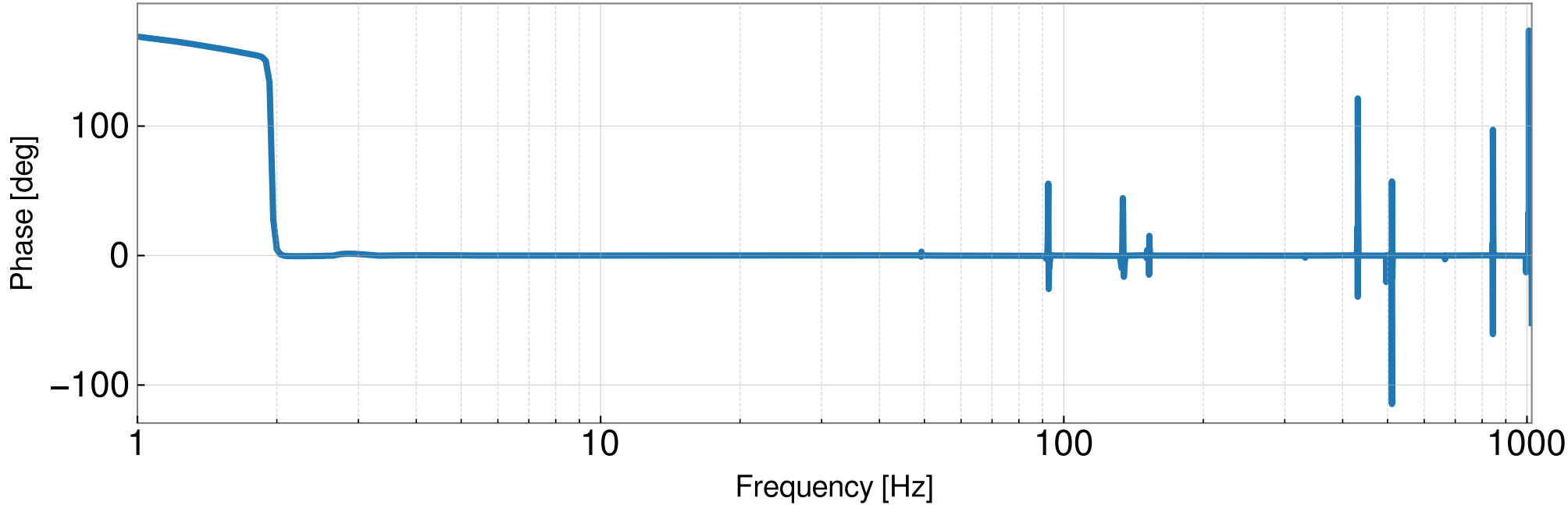
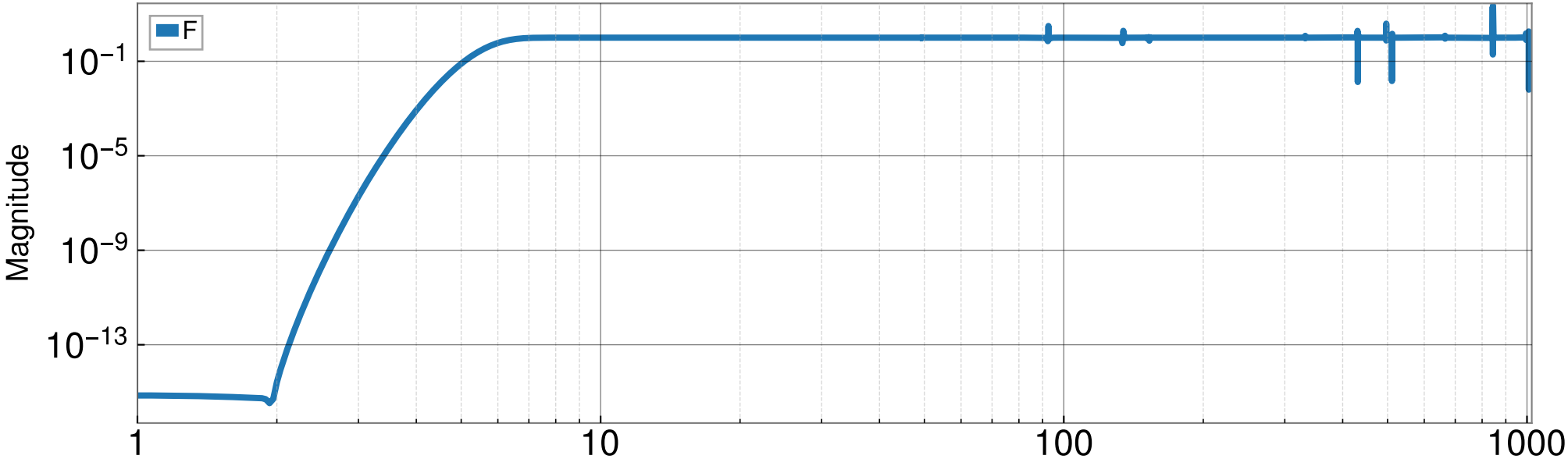
UIM corrections comparison

(gstlal_compute_strain_C00_filters_H1.npz)



Ratio of UIM corrections comparison

(gstlal_compute_strain_C00_filters_H1.npz)



Ratio of UIM corrections comparison

(gstlal_compute_strain_C00_filters_H1.npz) (above 10 Hz)

